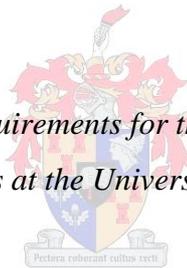


Community/neighbourhood park use in Cape Town: A class-differentiated analysis

by
Lodene Willemse

*Thesis presented in fulfilment of the requirements for the degree Master in Geography and
Environmental Studies at the University of Stellenbosch*



Supervisor: Prof. SE Donaldson
Faculty of Arts
Department of Geography and Environmental Studies

December 2010

AUTHOR'S DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Signature:

A handwritten signature in cursive script, appearing to read 'L. Williams', written in a light purple or blue ink.

Date:

22 November 2010

ABSTRACT

The aim of this study was to determine how class differentiation influences local residents' perceptions, preferences, needs and use of community/neighbourhood parks in the City of Cape Town. The research objectives included mapping the social geography and park provision; determining profile information, general park-usage information, outdoor recreation options, service-delivery perceptions and levels of park satisfaction; and making suggestions to the City Parks Department. Data were collected from the Flowmap and geographic information systems (GIS) programmes, the 2007 Community Survey, Census 2001 and questionnaires that were distributed through schools. Two Flowmap and GIS proximity analyses were conducted. Questionnaire data were processed at the automatic scanner of the Centre for Teaching and Learning (CTL) at Stellenbosch University. Open-ended data were manually analysed in the Statistical Package for the Social Sciences (SPSS), Excel and Word. The research findings indicate that class differences have an effect on the respondents' demographic profiles, park provision, park usage and contentment with parks. The high- and middle-income group respondents can reach more parks, mostly within 0-5 minutes. Park provision and park proximity are more problematic for the low-income group respondents. The low-income group children frequent parks the most and visit them the longest. Children and adults in all income groups mostly walk to parks. Parks are used for active and passive recreation during different life stages. The low-income group respondents are more satisfied with service delivery, while no income groups regard parks and recreation as a crucial service to improve. Parks are also not an important outdoor recreation option for any income group. The respondents' fears and dissatisfaction related to parks were expressed through concerns regarding safety and maintenance and a lack of park facilities and vegetation, which influences their satisfaction with parks. Future research recommendations include a park analysis of more diverse demographic profiles, distributing questionnaires to various places with authority, integrating research on community/neighbourhood park usage and the open-space system, and researching the challenges, solutions and means to encourage interclass park usage in desegregated areas.

Keywords and phrases: class differences in community/neighbourhood park usage; urban/city parks/play spaces/grounds; recreation facilities/areas; public and private parks/spaces; community perceptions/preferences/needs/expectations of parks/urban green spaces; demographic characteristics/geographic behaviour of park users; delivery/distribution/accessibility/proximity of local parks; public engagement/participation in public open spaces and parks; suggestions for better park usage.

OPSOMMING

Die doel van hierdie studie was om te bepaal hoe klasverskille plaaslike inwoners se persepsies, voorkeure en gebruik van en behoefte aan gemeenskaps-/woonbuurtparke in die Stad Kaapstad beïnvloed. Die navorsingsdoelwitte het die volgende ingesluit: kartering van die sosiale geografie en parkvoorsiening; 'n bepaling van profielinligting, algemene parkgebruikinligting, buitemuurse ontspanningsopsies, diensleweringpersepsies en vlakke van parkbevediging; en om voorstelle aan die Departement Stadparke te maak. Data is van die Flowmap en geografiese inligtingstelsels (GIS) programme, die 2007 gemeenskapsopname, Sensus 2001 en vraelyste wat deur skole versprei is, versamel. Twee Flowmap- en GIS-nabyheidsanalises is gedoen. Vraelysdata is met die outomatiese skandeerder van die Sentrum vir Onderrig en Leer (SOL) by die Universiteit van Stellenbosch geprosesseer. Data van oopvrae is met die hand in die Statistiese Pakket vir die Sosiale Wetenskappe (SPSS), Excel en Word geanaliseer. Die navorsingsbevindings toon dat klasverskille 'n effek op die respondente se demografiese profiele, parkvoorsiening, parkgebruik en tevredenheid met parke het. Die hoë- en middel-inkomstegroep-respondente kan meer parke bereik, meestal in 0-5 minute. Parkvoorsiening en nabyheid aan 'n park is vir die lae-inkomstegroep-respondente meer problematies. Die lae-inkomstegroep-kindere besoek parke die meeste en vir die langste tydperk. Die meeste kindere en volwassenes in alle inkomste-groepe stap na parke toe. Gedurende verskillende lewensfasies word parke vir aktiewe en passiewe ontspanning gebruik. Die lae-inkomstegroep-respondente is meer tevrede met dienslewering, terwyl geen inkomste-groepe parke en ontspanning as 'n kritieke diens beskou wat verbeter moet word nie. Parke is ook nie 'n belangrike buitemuurse ontspanningsopsie in enige inkomste-groep nie. Die respondente se vrese en ontevredenheid ten opsigte van parke is uitgedruk deur kommer oor veiligheid en instandhouding en 'n gebrek aan parkfasiliteite en plantegroei, wat hul tevredenheid met parke beïnvloed. Toekomstige navorsingsvoorstelle sluit in om 'n parkanalise op meer diverse demografiese profiele uit te voer, om vraelyste na verskeie plekke met outoriteit te versprei, om navorsing oor gemeenskaps-/woonbuurtparke en die oopruimtesisteem te integreer, en om navorsing oor die uitdagings, oplossings en metodes om inter-klas-parkgebruik in gedesegegreerde areas aan te moedig, uit te voer.

Trefwoorde en frases: klasverskille in gemeenskaps-/woonbuurtparkgebruik; stedelike parke/speelruimtes/speelgronde; ontspanningsfasiliteite/-areas; publieke/openbare en private parke/ruimtes; gemeenskaps-persepsies/-voorkeure/-behoefte/-ervarings van parke/stedelike groen ruimtes; demografiese eienskappe/geografiese gedrag van parkgebruikers;

voorsiening/verspreiding/toeganklikheid/nabyheid aan plaaslike parke; publieke/openbare deelname in publieke/openbare oop ruimtes en parke; voorstelle vir beter parkgebruik.

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation and thanks to the following people for their assistance with my thesis:

- **Professor Ronnie Donaldson** for his continued support and guidance, not only as supervisor of the thesis, but also throughout my time at university. Regardless of how long it took to help, Professor Donaldson was always willing to be of assistance, listen and give proficient advice. It was a pleasure to be able to complete the thesis successfully through his expert supervision and encouragement.
- **Gerbrand Mans** from the Council for Scientific and Industrial Research (CSIR) for his continuous assistance with the thesis. Gerbrand advised and assisted me with the GIS calculations for the thesis and made valuable suggestions, which influenced the course of the research.
- The **personnel of the Department of Geography and Environmental Studies** for their continued support and assistance throughout my studies at the university.
- The **CSIR** for allowing me to do the thesis in collaboration with their research project for the City of Cape Town.
- **Jackie Viljoen** for her editing of the thesis. Jackie is a general language practitioner.
- **Granville van Ross and John Bennett** from the City Parks Department for their continued input into the CSIR project, which also influenced the thesis. I would also like to thank them, and the CSIR, for giving me the opportunity to present my findings to them. Furthermore, I would like to express gratitude to Granville van Ross for assisting me in searching for government sources pertaining to park usage in the City of Cape Town and in other cities in South Africa.
- The **schools, principals, teachers and secretaries** for distributing and collecting the questionnaires to and from learners' parents. I would also like to thank the **parents and learners** who were willing to complete the questionnaires. Without these key role players, I

would not have been able to complete this master's degree successfully and make valuable suggestions to the City Parks Department about park usage in the City of Cape Town.

- **Stellenbosch University** for its continued financial support of my university studies. My gratitude also goes out to the **South Africa Netherlands Research Programme on Alternatives in Development (SANPAD)** and the **Deutscher Akademischer Austauschdienst or German Academic Exchange Service (DAAD)** in Germany that have provided me with bursaries to further my master's studies.

- My **parents, mom Marlene and dad Wikus, and my sister Danicke** for their love, continued motivation, support and assistance, and faith in my abilities.

- And most importantly, **the Lord** for giving me the talents that I have and for giving me the opportunities that I have received in my life. Without the Lord, it would not have been possible for me to study at university.

CONTENTS

	Page
AUTHOR’S DECLARATION.....	ii
ABSTRACT.....	iii
OPSOMMING.....	iv
ACKNOWLEDGEMENTS.....	vi
CONTENTS.....	viii
TABLES.....	xi
FIGURES.....	xiii
APPENDICES.....	xiv
ACRONYMS.....	xv
CHAPTER 1: SETTING THE SCENE.....	1
1.1 INTRODUCTION.....	1
1.2 RESEARCH PROBLEM.....	4
1.3 AIM AND OBJECTIVES.....	5
1.4 METHODOLOGY.....	6
1.4.1 Literature review.....	6
1.4.2 Data sampling.....	7
1.4.3 Data design and collection.....	8
1.4.4 Data processing and analysis.....	10
1.4.4.1 Flowmap and GIS processing and analysis.....	10
1.4.4.2 Questionnaire processing and analysis.....	12
1.5 THE RESEARCH DESIGN.....	13
1.6 THESIS STRUCTURE.....	14
CHAPTER 2: INTERNATIONAL EXPERIENCES RELATING TO PARKS: LESSONS FOR SOUTH AFRICA.....	15
2.1 INTRODUCTION.....	15
2.2 A SCHEME OF URBAN GREEN SPACE.....	15
2.3 VALUE AND BENEFITS OF PARKS.....	17
2.4 THE GEOGRAPHY OF CLASS AND PARK USE.....	20

2.5	ELEMENTS OF PARK USAGE.....	22
2.5.1	Park users.....	23
2.5.1.1	Developed countries.....	23
2.5.1.2	Developing countries.....	27
2.5.2	Park-use activities.....	28
2.5.3	Park non-use.....	31
2.5.3.1	Intrapersonal constraints to park usage.....	32
2.5.3.2	Interpersonal constraints to park usage.....	33
2.5.3.3	Structural constraints to park usage.....	34
2.5.4	Park space.....	39
2.6	CONCLUSION.....	40

CHAPTER 3: SPATIAL GEOGRAPHY OF PARKS IN THE CITY OF CAPE TOWN.....	42	
3.1	INTRODUCTION.....	42
3.2	PARK AVAILABILITY PER SOCIO-ECONOMIC AREA.....	42
3.3	PARK AVAILABILITY PER DISTANCE.....	45
3.4	CONCLUSION.....	49

CHAPTER 4: PARK USAGE ANALYSIS.....	51	
4.1	INTRODUCTION.....	51
4.2	DEMOGRAPHIC PROFILES OF THE RESPONDENTS.....	52
4.3	URBAN NATIONAL PARK USE.....	54
4.4	PARK USE.....	58
4.4.1	Frequency of park use.....	58
4.4.2	Time spent in parks.....	61
4.4.3	Distances to parks.....	62
4.4.4	Mode of transport used to visit parks.....	63
4.4.5	Participation in activities.....	64
4.4.6	Reasons for park non-use.....	68
4.5	OUTDOOR RECREATION PLACES.....	71
4.6	CONCLUSION.....	72

CHAPTER 5: LEVELS OF SATISFACTION WITH PARKS.....	75
--	-----------

5.1	IMPORTANCE OF PARKS IN RELATION TO SERVICE-DELIVERY MANDATES.....	75
5.2	SATISFACTION INDEX.....	79
5.3	NUISANCE INDEX.....	85
5.4	FACILITY NEEDS AT PARKS.....	88
5.5	CREATING ‘IDEAL PARKS’.....	90
5.6	COMMENTS AND SUGGESTIONS ABOUT PARK USAGE.....	91
5.7	CONCLUSION.....	92
CHAPTER 6:	CONCLUSION: PROVIDING ADEQUATE PARKS.....	94
6.1	SUMMARY AND SYNTHESIS OF THE MAIN FINDINGS OF PARK PROVISION AND PARK USAGE IN THE CITY OF CAPE TOWN.....	94
6.1.1	Class as an indicator of the spatial geography of parks.....	94
6.1.2	Class as an indicator of park usage.....	96
6.1.3	Class as an indicator of service delivery and contentment with parks.....	100
6.2	RECOMMENDATIONS FOR BETTER PARK USAGE.....	102
6.3	CONCLUSION.....	107
6.4	LIMITATIONS OF THE STUDY.....	108
6.5	RECOMMENDATIONS FOR FUTURE RESEARCH.....	111
7	REFERENCES.....	112
8	PERSONAL COMMUNICATIONS.....	122
9	APPENDICES.....	123
	APPENDIX A: PERMISSION TO CONDUCT RESEARCH	124
	APPENDIX B: AFRIKAANS QUESTIONNAIRE	126
	APPENDIX C: ENGLISH QUESTIONNAIRE	131
	APPENDIX D: ISIXHOSA QUESTIONNAIRE	136
	APPENDIX E: HOME LANGUAGES SPOKEN IN THE SUBURBS OF THE THREE INCOME CATEGORIES	141
	APPENDIX F: RECOMMENDATIONS FOR BETTER PARK USAGE	143

TABLES

	Page
Table 1.1 The questionnaire return rate for each income group.....	9
Table 1.2 Time-distance guideline.....	12
Table 1.3 Steps taken in the scanning process and problems encountered.....	12
Table 2.1 Activity types.....	29
Table 2.2 The influence of age, gender and race on determining recreation activities in parks in developed countries.....	30
Table 2.3 The open-space (park) requirements of identifiable user groups.....	31
Table 3.1 The population's park provision in the three income groups in the City of Cape Town.....	44
Table 3.2 The total population in the City of Cape Town who can reach a park within varying distances.....	49
Table 3.3 Percentage of each income group who can reach a park within varying distances.....	49
Table 4.1 Respondents' demographic profile.....	53
Table 4.2 Frequency of Table Mountain National Park use.....	55
Table 4.3 Reasons for not visiting the Table Mountain National Park.....	55
Table 4.4 Proximity to conservation/biodiversity areas and parks.....	56
Table 4.5 Respondents who want new parks closer to their homes.....	57
Table 4.6 Respondents who visit existing parks with varying frequency who mostly want the new parks closer to their homes.....	57
Table 4.7 Distances to parks influence the frequency of park usage.....	60
Table 4.8 The frequency with which respondents who do not have a private garden visit parks....	61
Table 4.9 Mode of transport children and adults use to get to parks.....	63
Table 4.10 Activities of children and adults in parks.....	65
Table 4.11 Activities of other residents in parks.....	67
Table 4.12 Reasons for park non-use.....	69
Table 4.13 Outdoor recreation of children and adults.....	71
Table 5.1 Services that require improvement or no improvement across the City of Cape Town..	78
Table 5.2 Park satisfaction index about park facility management and maintenance.....	79
Table 5.3 Motivations for low park satisfaction rating.....	81
Table 5.4 Nuisance index of parks.....	86
Table 5.5 Motivations for nuisance created in parks.....	87
Table 5.6 Facilities to be developed in parks.....	89

Table 5.7	What do the respondents' ideal parks look like.....	90
Table 5.8	Comments and suggestions about park usage.....	91
Table 6.1	A model/framework of the main park-use findings.....	95
Table 6.2	Summary of literature-based recommendations for better park usage.....	102
Table E1	Home languages spoken in the suburbs of the three income categories.....	141
Table F1	Recommendations for better park usage.....	143

FIGURES

	Page
Figure 1.1 Socio-economic context of residential areas in Cape Town.....	7
Figure 1.2 The spatial distribution of selected schools.....	9
Figure 1.3 The research design.....	13
Figure 2.1 A thematic scheme of how urban green space fits into the urban environment.....	16
Figure 2.2 The value of open spaces through functional, aesthetic and ecological attributes.....	18
Figure 2.3 Elements influencing people’s park usage.....	22
Figure 2.4 A benefits-based management strategy for governments to manage parks effectively.....	39
Figure 3.1 The spatial distribution of the current provision/availability of parks in the three income groups in the City of Cape Town.....	43
Figure 3.2 Park proximity with its capacity constrained in the three income groups in the City of Cape Town.....	46
Figure 3.3 Proximity to a park in the three income groups in the City of Cape Town.....	48
Figure 4.1 Children and adults’ frequency of park use.....	59
Figure 4.2 The time children and adults spend in parks.....	61
Figure 4.3 Distances to parks in minutes and metres.....	62
Figure 5.1 Levels of satisfaction with service delivery since the last local government elections....	76
Figure 5.2 Maslow’s hierarchy of needs pyramid.....	77

APPENDICES

	Page
Appendix A: Permission to conduct research.....	124
Appendix B: Afrikaans questionnaire.....	126
Appendix C: English questionnaire.....	131
Appendix D: IsiXhosa questionnaire.....	136
Appendix E: Home languages spoken in the suburbs of the three income categories.....	141
Appendix F: Recommendations for better park usage.....	143

ABBREVIATIONS AND ACRONYMS

	Page
Geographic information systems (GIS).....	iii
Centre for Teaching and Learning (CTL).....	iii
Statistical Package for the Social Sciences (SPSS).....	iii
Geografiese inligtingstelsels (GIS).....	iv
Sentrum vir Onderrig en Leer (SOL).....	iv
Statistiese Pakket vir die Sosiale Wetenskappe (SPSS).....	iv
Council for Scientific and Industrial Research (CSIR).....	vi
South Africa Netherlands Research Programme on Alternatives in Development (SANPAD).....	vii
Deutscher Akademischer Austauschdienst or German Academic Exchange Service (DAAD).....	vii
Group Areas Act (GAA).....	2
Reservation of Separate Amenities Act (RSAA).....	2
African National Congress (ANC).....	3
Reconstruction and Development Programme (RDP).....	3
Growth, Employment and Redistribution (GEAR).....	4
Integrated Development Plans (IDPs).....	4
Western Cape Education Department (WCED).....	8
Non-governmental organisations (NGOs).....	111

CHAPTER 1: SETTING THE SCENE

Studies concerning the interaction of humans with their environment over space and time (specifically the interaction of humans with parks) are embedded in the discipline of geography (Penderis 1996). Although the nature of this interaction changes constantly (Jansen van Vuuren 2005), parks continue to play an important role in building infrastructure for cities – which is essential for creating healthy life styles, enhancing the values of urban settings and providing dynamic and attractive recreation opportunities for citizens (International Federation of Parks and Recreation Administration 2006). However, “parks are under threat from a lack of resources and an increase in antisocial activities, [among other things]. Reduced government budgets provide less capacity to maintain parks and poorly maintained parks become convenient locations for [antisocial behaviour and crime-related activities]” (International Federation of Parks and Recreation Administration 2006: 12). The City of Cape Town’s (2005: 1) mission statement for parks is to “identify, develop, enhance and conserve the ‘green’ environment and open spaces for present and future generations”. To assist the City Parks Department to achieve the aforementioned, a class-differentiated study was undertaken in Cape Town to determine residents’ park usage patterns and their perceptions and preferences about parks.

Chapter 1 sets the scene for the research process that was followed. The real-world problem, research problem, aim, objectives, data sources and methodology are discussed in this chapter. The methodology describes the research steps taken to conduct the research. The methodology includes the literature review, data design, data sampling and collection and data processing and analysis. The study area, the City of Cape Town, is also demarcated in the chapter. The research design gives an overview of the full research process that was followed and the thesis structure explains the chapters of the thesis.

1.1 INTRODUCTION

The need for the sustainable maintenance and equal provision of proximate and accessible parks¹ in the City of Cape Town, is a part of the broader South African service-delivery problem (Bond

¹ ‘Parks’ refer to ‘community/neighbourhood parks’ *throughout* all of the chapters in the thesis, unless otherwise stated. The City of Cape Town (2005: 3) defines local parks, which include community/neighbourhood parks, as “developable land with recreation facilities, which serve the needs of the local community or neighbourhood and are usually accessed on foot. It includes informal recreation facilities of small scale for children such as tot-lots and playgrounds, seating areas, open grass lawns and gardens.”

2000). South Africa's past segregation practices left a legacy of inequality, poverty and backlogs (Bond 2002; McDonald & Pape 2002; Mubangizi & Mubangizi 2005), and in the past, the white minority had access to services at the expense of the black majority (Booyesen 2007; Ruiters 2001; Smith & Vawda 2003).

Many forces have shaped spatial forms of South African cities, but perhaps the most important is the oppressive and racial discriminatory political system of apartheid (South African Government 1994; Swilling, Humphries & Shubane 1991; Western 1981; Wilson 1989). The former government's policy was based on "urban racial segregation – and town planning was the prime tool through which new and existing urban landscapes were fashioned" (Harrison, Todes & Watson 2008: 9). Various pieces of legislation were used to implement apartheid. In terms of the 1913 and 1936 Land Acts, white land ownership amounted to 87% of the land area, and black homelands to only 13% of the land (Hattingh 1979; Smith 1992). The Population Registration Act (1950) divided the South African population into mainly four major racial groupings: white, coloured, Asian and black (Merrett 2009; Smith 1992; Swilling, Humphries & Shubane 1991). The Group Areas Act (GAA) (1950) required the strict segregation of the four population groups into discrete areas (Smith 1992; Swilling, Humphries & Shubane 1991; Western 1981; Wilson 1989). The basis of the GAA was to have "controlled areas in which the racial status quo was maintained by property ownership. Group areas had a radical purpose: to achieve racially pure ownership and occupation by area. The objective was to minimise the need for each group of South Africans to use another's space" (Merrett 2009: 183). At an urban level, the application of the ideology of apartheid resulted in cities and towns with very diverse spatial forms – segregated by race and income (Harrison, Todes & Watson 2008).

Segregated sections in the city were separated by buffer zones (roads, railway lines or green belts) and there were few access routes into cities (Harrison, Todes & Watson 2008). Buffer zones served as neutral areas between different communities (Merrett 2009). Black people were forced into townships that were usually located at the periphery of towns (Harrison, Todes & Watson 2008). Each of the group areas had to contain their own facilities and services. To achieve the aforementioned, the apartheid government passed the Reservation of Separate Amenities Act (RSAA) in 1953. The RSAA allowed the provincial and municipal authorities to regulate public access to services (Merrett 2009; Swilling, Humphries & Shubane 1991; Wilson 1989). The apartheid government originally planned service delivery to be temporary in nature, because black people were seen as temporary city dwellers (Jaglin 2008; Wilson & Hattingh 1989; Wilson 1989). This led to an imbalance in access to services in South Africa (Smith 1992). Most of the resources

and higher-order social services were allocated to the white people, where the economic opportunity was also located, while townships remained ‘dormitory’, impoverished and poorly serviced areas (Harrison, Todes & Watson 2008; South African Government 1994; Smith 1992), resulting in many years of uproars about inadequate township infrastructure and service delivery (Swilling, Humphries & Shubane 1991).

The apartheid government saw housing as a more important service to deliver to black people, because of rapid growing black urbanisation to cities. Other less important facilities, such as recreation², were not delivered to the same extent – the result being that the delivery of recreation facilities did not keep up with urban expansion (Wilson & Hattingh 1989). The aforementioned is well documented by South African scholars.³ These researchers documented the lack of recreation spaces (parks) in black townships. They ascribed the lack of park spaces to an unequal distribution in park location, accessibility, capacity, function and development that occurred during the apartheid years. The ‘inaccessible recreation delivery’, as noted by Wilson (1989), manifested through the quantity and quality of recreation facilities and inaccessible planning and funding in black homeland areas (Wilson 1989; Wilson 1992).

Recreation is “one of the areas in South African life in which social injustice is most clearly marked. Recreation (as a need) and facilities for its expression are both neglected or are given low priority” (Butler-Adam & Franke 1986: 70). The GAA and RSAA were a violation of black people’s personal liberty. The laws further acted as a barrier to develop African participation in recreation and sporting activities (Merrett 2009). The lack of appropriate recreation spaces during apartheid is further summarised by a black person from Soweto, who said in Kies’s (1982: 23) study: “Where can I go? There is no place. And recreation is important. The very first thing to go up is houses and water reticulation. No streets or electric lights. Yes, give me a house, I want a roof over me. But, what do I do? Where do I do it? Recreation? That can come 10 or 15 years later.”

In order to solve the skewed service-delivery system, the post-apartheid government (African National Congress) (ANC) embarked on a Reconstruction and Development Plan (RDP) in 1994 to ensure that all citizens have access to basic services (City of Cape Town 2006/7; City of Cape Town 2007/8; Mubangizi & Mubangizi 2005; Van Zyl 1995). One of the human resources that the

² Recreation is defined as any activities/experiences in which people willingly participate during their leisure time, because of the enjoyment and contentment which it brings directly to them (Torkildsen 2005).

³ These scholars include Hugo (1973); Wilson (1989); Wilson & De Wet (1992); Wilson & Hattingh (1989); Wilson & Hattingh (1990); Wilson & Hattingh (1991); Wilson & Hattingh (1992).

government wanted to develop through the RDP was sport and recreation (South African Government 1994). Apartheid has denied millions of people access to sport and recreation services. The RDP believed that through providing sport and recreation services, every person could have the right to a normal and healthy life (South African Government 1994). The mandate of the RDP, in terms of sport and recreation “was to remove the obstacles associated with apartheid policies, so that all South Africans, including those in rural areas, the young and the elderly, would have affordable access to sport and recreation services” (South African Government 1994: 40).

The ANC changed its economic policy to a market-driven neo-liberal approach, namely the Growth, Employment and Redistribution (GEAR) strategy in 1996 (McDonald 1998; Pillay, Tomlinson & Du Toit 2006; Wenzel 2007). The rationale of GEAR was not equitable service delivery as part of a developmental state, as was the case with the RDP, but rather profit making and rent seeking. People change from citizens to customers through the government charging fees to receive services (Burger 2005; Jaglin 2008; McDonald 2008; McDonald & Smith 2002, Smith & Vawda 2003). Integrated Development Plans (IDPs) were also introduced in 1996. The purpose of the IDPs was, among other things, to identify needs and to structure service delivery at local government level to meet these needs (Pillay, Tomlinson & Du Toit 2006; Smith & Vawda 2003). For example, the City of Cape Town’s 2006 IDP indicated that parks and recreation was identified by 60% of residents as the most essential local need/issue in 2005’s ward committee meetings (City of Cape Town 2006/7).

1.2 RESEARCH PROBLEM

Section 24 of the Bill of Rights proclaims that “everyone has the right to an environment that is not harmful to their health or well-being” (Ruiters 2001: 95). This right means that reasonable legislation should protect the environment to prevent degradation and promote sustainable use of natural resources. This right furthermore means that the government has the responsibility to provide environmental services to all South Africans (City of Cape Town 2006/7; McDonald 1998; Western Cape Government 1994). Providing parks is one method through which the government can do the aforementioned. Parks can play an integral role in providing environmental recreation to all in South Africa. However, today, South African cities and towns remain spatially divided, but not explicitly according to race, but due to market operations and consequent economic inequalities (Harrison, Todes & Watson 2008). South Africa and Cape Town more specifically, also experience pressure to develop open pieces of land as parks, versus developing it for housing or as industries, for example. The growing population requires more development, but a careful balance needs to be

found to ensure that both needs (parks and development) are met. People and nature need to co-exist in order to create a sustainable country and city (McDonald 2002; Wall 1992).

The South African geographical literature on park usage is limited in scope, and this gap was noted as early as 1989 by Lourens (1989a) and shortly thereafter by Wilson (1992) and Wilson & De Wet (1992). There are two main problems associated with the provision of parks in the City of Cape Town. Firstly, continued population growth and urbanisation put strain on the delivery of parks. The population growth and urbanisation create a situation where parks are continuously lost to development. Unequal development in suburbs causes parks to be spread out unequally across suburbs in the City of Cape Town (Pillay, Tomlinson & Du Toit 2006; Wall 1992; Walters 2005). Secondly, people's preferences differ. A "newly urbanised person living in a shack in an informal settlement might perceive improvement of the environment as the provision of jobs, infrastructure and housing. Meanwhile, a more affluent person might feel that infrastructure and housing is causing a deterioration of the environment, as yet another [park] is built upon" (Wall 1992: 313). These two problems culminate in a third problem. The government often do not consult with local communities to determine their needs and preferences concerning outdoor recreation activities. Despite the government's attempt to allow more community participation in local service delivery, the government still often follows a top-down and quick-fix approach to service delivery. The result is that parks do not always satisfy the needs and preferences of local residents. Local residents are discouraged to use parks and when they do use their local parks, they often complain that the government does not maintain it properly. The City of Cape Town's IDP (City of Cape Town 2006/7) states that the provision of equitable and accessible quality parks is necessary to provide a safe green environment to all. As "citizens are heterogeneous in character, their access to parks is affected by the distribution of these parks. For this, the development and implementation of minimum standards, for the maintenance and equitable delivery of parks across the City of Cape Town, should be determined" (City of Cape Town 2006/7: 84), because no thorough analysis has been done to date.

1.3 AIM AND OBJECTIVES

The main aim of this study was to determine how class differentiation influences local residents' perceptions, preferences, needs and use of parks in the City of Cape Town. The specific objectives of the study were to:

- review the literature on people's perceptions and preferences of park usage/non-usage;

- map the social geography of the City of Cape Town;
- analyse and map the following for the City of Cape Town through Flowmap and geographic information systems (GIS) analyses: the provision/availability of parks; park proximity with its capacity constrained (in other words, determine what part of the population is able to travel how far to a park facility with a certain capacity) and only park proximity (stated otherwise, determine what part of the population is able to travel how far to a park facility);
- identify park users/non-users' demographic profile information;
- differentiate between the high-, middle- and low-income groups' park-usage patterns;
- determine the respondents' perceptions of general service delivery and establish the importance of park and recreation services in comparison to other services;
- identify the respondents' levels of satisfaction with the quality of services, amenities, facilities, design and maintenance of parks in the high-, middle- and low-income groups in the City of Cape Town; and
- make suggestions to the City Parks Department to assist it to effectively formulate adequate policies, planning, design, maintenance and management issues of parks in the City of Cape Town.

1.4 METHODOLOGY

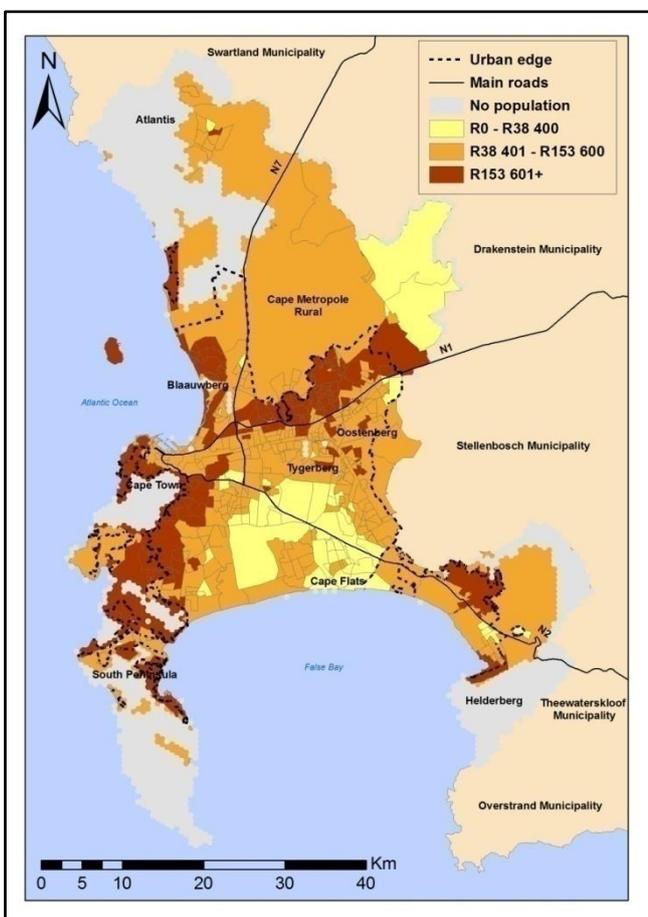
The methodology describes the ways in which this study was conducted. Firstly, a literature review was done to obtain relevant park-usage sources. Secondly, data sampling was performed to obtain the correct sample sizes. Thirdly, the questionnaires were correctly designed and it was collected. Thirdly, the Flowmap, GIS and questionnaire data processing and analysis was conducted.

1.4.1 Literature review

A comprehensive literature review was conducted on park usage in an international and South African context. Only limited literature was found describing South African urban park usage. The literature focuses on where parks fit into the broader open-space system, the value and benefits of parks and describing elements of park usage in the context of social class differences. The following issues are discussed: the demographics of park users/non-users, the frequency of park usage, what people actually use parks for (the activities in which they partake in parks), park non-use and how the park space itself influences park usage.

1.4.2 Data sampling

In order to explain the data collection, it is firstly important to explain the sampling and questionnaire design methods employed to determine where questionnaires were distributed and which questions were included in the questionnaire. Census 2001 data (Statistics South Africa 2001) analysis was conducted in Excel and ArcMap (GIS). The number of households per income group for the City of Cape Town was recalculated, through an area-proportioned process, to indicate average household income per suburb for 2001. The result is a map indicating suburbs in three income categories – high-, middle- and low-income suburbs (Figure 1.1). A shapefile containing a schools layer was joined to the shapefile containing the income layer – indicating which schools are situated in which suburbs and income groups.



Data sourced from: Statistics South Africa (2001).

Figure 1.1 Socio-economic context of residential areas in Cape Town

The questionnaire survey was facilitated via schoolchildren to their parents who participated in the self-administered questionnaire survey. In order for the results to be representative, a minimum of 385 questionnaires had to be returned per income group, in other words a grand total of 1155

questionnaires, to obtain a 95% accuracy rate. In order to counteract the general low response rate of questionnaires, 500 questionnaires were distributed in each income group, in other words 1500 questionnaires in total. Initially, a stratified random sample of 38 schools in each income group, 114 schools in total, was selected through the Excel random selection function. The Western Cape Education Department (WCED) gave permission for the research to be conducted through the schools (Appendix A). The 114 schools were contacted and e-mailed to explain the research process, to establish whether schools were willing to participate in the research or not and to determine the language preferences of the learners. Overall, 28 schools in the high-income group, 31 in the middle-income group and 21 in the low-income group gave their permission. For administrative and logistical reasons it was decided to only work with the first 20 schools in each income group, giving 60 schools in total.

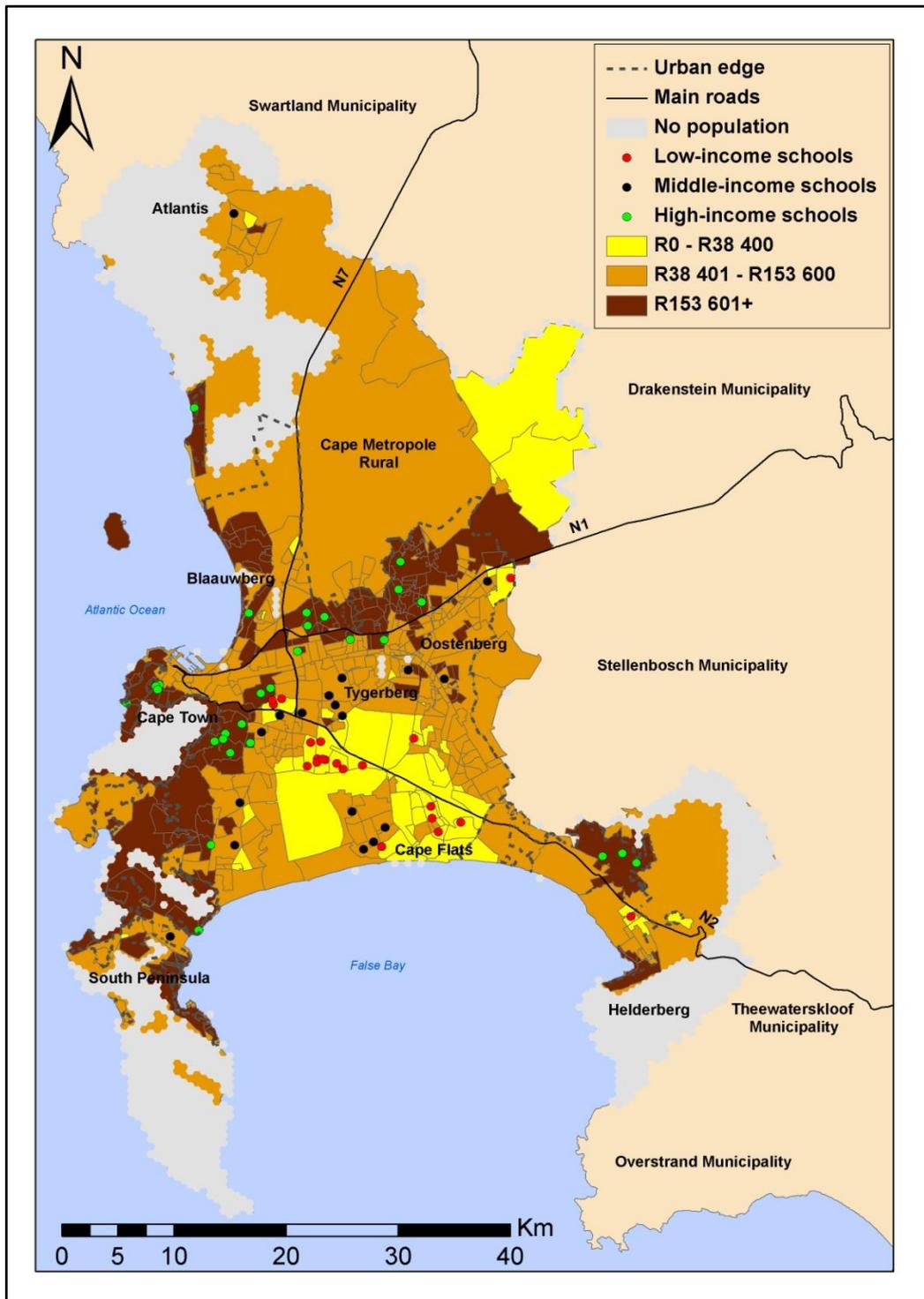
1.4.3 Data design and collection

The questionnaires were designed in Afrikaans, English and IsiXhosa for the head of the family to complete. The questionnaires were pilot-tested among workers at the Council for Scientific and Industrial Research (CSIR). The Centre for Teaching and Learning (CTL) at Stellenbosch University redesigned the questionnaires' layout in order for a scanner to automatically pick up the closed-ended answers. The questionnaire (Appendices B to D) consists of five sections of open- and closed-ended questions. Section A covered general information, Section B the frequency of conservation/biodiversity areas use, Section C the frequency of park use, Section D the activities in which people participate in parks and Section E the management and maintenance of parks.

Data collection was done through computerised data sources and self-reporting. Computerised data sources consisted of Flowmap data, GIS data, 2007 Community Survey data, Census 2001 data and questionnaire data. Flowmap data and GIS shapefiles, indicating the current provision of parks, were obtained from the CSIR. Disaggregated 2007 Community Survey data (Statistics South Africa 2007) were also obtained from the CSIR. Census 2001 data (Statistics South Africa 2001) consisted of the number of households per income group for the City of Cape Town. Self-reporting data consisted of questionnaires. Table 1.1 shows the questionnaire return rate for each income group and reflects a representative sample of the specific income groups. Overall, 1288 questionnaires were returned, with the low-income group returning most of the questionnaires. Two schools in the middle-income group withdrew from the study, but the remaining 18 schools are still a representative sample of the middle-income suburbs. Figure 1.2 shows the spatial distribution of the 58 schools in the three income groups that participated in the study.

Table 1.1 The questionnaire return rate for each income group

Income category	Number of schools that participated in the study	Number of questionnaires sent out	Number of questionnaires returned	Percentage of questionnaires returned	Overall percentages of returned questionnaires
High-income	20	500	413	83%	32%
Middle-income	18	500	386	77%	30%
Low-income	20	500	489	98%	38%
Total	58	1500	1288	86%	100%



Data sourced from: Statistics South Africa (2001).

Figure 1.2 The spatial distribution of selected schools

1.4.4 Data processing and analysis

The computerised data were analysed through various Flowmap and GIS techniques, while the self-reporting data (questionnaire data) were analysed using scanning technology and the Statistical Package for the Social Sciences (SPSS), Microsoft Excel and Word.

1.4.4.1 Flowmap and GIS processing and analysis

Before maps could be created in ArcMap (GIS) to indicate park proximity with its capacity constrained and an analysis of only park proximity, respectively, the CSIR performed two Flowmap analyses. Flowmap is a programme for geographical analysis, developed at the Faculty of Geosciences of the Utrecht University in the Netherlands (Van der Zwan et al. 2005a). Flowmap specialises in storing, displaying and analysing spatial flow patterns. The programme further displays “interaction data like commuting and migration flows, interaction analysis like accessibility/proximity analysis” (Van der Zwan et al. 2005a: s.p.) and “network analysis such as computing distances, travel times or transport costs and interaction modelling” (Van der Zwan et al. 2005b: 7). The capabilities of Flowmap made it an excellent programme to create the proximity maps for this type of research.

The two Flowmap analyses that were done by the CSIR required the following inputs: a road network, to calculate travel time and distance; the existing park facilities; the capacity of each park facility; and 2007 population figures of the City of Cape Town (Mans 2009a; Mans 2009b, pers com). Park capacity was determined by the CSIR’s draft standards document (Green & Argue 2007), in which park capacity was calculated at 750 metres to a park and each park having 0.5 hectares for every 1000 people. The City of Cape Town obtained the 2007 Community Survey data from Statistics South Africa (Statistics South Africa 2007). The City of Cape Town disaggregated the 2007 Community Survey data into smaller areas in the City of Cape Town. The disaggregation was based on a “combination of different data sets, which include land use, digitising of informal settlements from aerial photography, cadastral data, registration of new developments and surveys of backyard dwellers in suburbs with a high percentage of backyard dwellers” (Mans 2009b, pers com). To determine a park proximity with its capacity-constrained analysis, the CSIR further disaggregated the City of Cape Town’s data to a hexagon layer, with each hexagon representing 40 hectares. Hexagons were chosen for the disaggregation process, because Flowmap was designed to analyse data on a hexagon layer (Mans 2009b, pers com). Both proximity analyses (park proximity with its capacity constrained and an analysis of only proximity

to a park) work with the number of people that can reach a park and not the number of people in a suburb. The reason for this is when Flowmap determines proximity; it determines the park that is located closest to the population. The park located closest to a person is not necessarily located in that person's own neighbourhood (Mans 2009b, pers com).

All the layers interacted and determined what part of the *population* is able to travel how *far* (in this case 750 metres along a road network) to a park facility with a certain *capacity* (in this case 0.5 hectares per 1000 people) (Mans 2009a). The output is a distance table, which contains different possible combinations of interactions of the aforementioned criteria (Van der Zwan et al. 2005b). The CSIR added the table of the park proximity with its capacity-constrained analysis into ArcMap (GIS) and through GIS techniques created a map indicating park proximity with its capacity constrained. The income layer of 2001 was added to the CSIR's map and re-symbolised to create a new map indicating park proximity with its capacity constrained in the three income groups in the City of Cape Town.

The second Flowmap analysis that the CSIR performed was to determine park proximity, which displays the proximity to a park only. The analysis required the same inputs into Flowmap – a road network, existing park facilities and 2007 population figures. However, the capacity of each park facility was not added into this analysis. The same process of analysis was followed as that for creating the aforementioned map. All the layers interacted and determined what part of the *population* travels how *far* to a park. The Flowmap table was added into ArcMap (GIS) and joined to the hexagon and income distribution layers to create a new shapefile. To create the park proximity map, it was firstly necessary to determine what an acceptable travel time to a park was. The acceptable time people are willing to walk to parks was deducted from the literature review, which states that 0-5 minutes is the most preferred time to walk to parks, followed by 6-10 minutes and 11-15 minutes, which is generally accepted to be the maximum time people are willing to walk to reach parks. A park that takes more than 15 minutes to reach is less satisfactory.⁴ However, the Flowmap and GIS analyses require the distance to be in metres. The acceptable time people take to reach a park had to be transferred to an acceptable distance in metres. To determine the distance in minutes and metres, a slow walk down a street was timed for five and 10 minutes. The position in the street was marked when five minutes were reached. The same was done for the 10 minute mark. A car was then driven down the same street – this time stopping when the markers were reached for

⁴ According to Burgess, Harrison & Limb (1988); City of Cape Town City Planner's Department (1997); CSIR (2000); Hansen (2006); McCormack et al. (2006); Spocter (2008); Walters (2005).

five and 10 minutes, respectively. From this exercise, the distance travelled in minutes on foot shows that it would take more than 15 minutes to walk just over 1.2 km (Table 1.2).

Table 1.2 Time-distance guideline

Travel time (in minutes)	Travel time (in metres)
0-5 minutes	0-400 metres
6-10 minutes	401-800 metres
11-15 minutes	801-1200 metres
More than 15 minutes	More than 1201 metres

Table 1.2 was used as guideline to export parks that take 0-400 metres to reach, from the newly created shapefile. The same was done for the other distances. The dissolve function was used to remove unnecessary boundaries between hexagons, after which the merge function was used to create a table indicating the total population in the three income groups who travel the varying distances to parks. The table also indicates the following in the specific income group and distance category to parks: the number of parks, the ratio of parks versus people and the total area of park space available to the population. A map indicating park proximity in the three income groups was created from the table. The analyses of the two park proximity maps are given in Section 3.3 in Chapter 3.

1.4.4.2 Questionnaire processing and analysis

Completed questionnaires were grouped into high-, middle- and low-income groups and into Afrikaans, English and IsiXhosa groups. The school name was written on each questionnaire for easy identification and the returned questionnaires were counted. The scanning process had five steps to follow before getting the data into Excel format (Table 1.3).

Table 1.3 Steps taken in the scanning process and problems encountered

Step	Scanning process steps	Tasks to perform in each step
1	Scan pages 1 and 2 together and pages 3 and 4 together	<ul style="list-style-type: none"> ➤ Remove all the paperclips ➤ Split questionnaires to have pages 1 and 2 together and pages 3 and 4 together ➤ Put the questionnaires back together
2	The scanner automatically ran a process of identifying individual objects and pages	<ul style="list-style-type: none"> ➤ If the scanner queried the page numbers, it had to manually added
3	Checking the answers	<ul style="list-style-type: none"> ➤ The scanner automatically jumped to where it was uncertain about an answer, but it skipped answers where mistakes were seen ➤ The scanner picked up answers where there were no answers given
4	Final checking of answers	<ul style="list-style-type: none"> ➤ This step allowed the manual checking of every answer in the questionnaires without jumping around
5	Create an Excel file of the codes	<ul style="list-style-type: none"> ➤ The CTL designed the Excel database. While adding the data into the Excel file, the CTL realised they made mistakes in the database's design. Consequently, they rescanned the problematic questionnaires and followed steps 2 to 4 in this table to add the data into the database

SPSS 16 was used for the questionnaire data analysis. The frequency counts, cross-tabulations and explore options were used to do data calculations, after which tables and figures were created in Excel. Data analysis commenced by doing cross-tabulations between the different variables and the three income groups, after which three-way cross-tabulations were done to determine more variables having an impact on each other. The number of respondents who have responded in a particular way is indicated with an 'n = ' sign in each table throughout the thesis.

1.5 THE RESEARCH DESIGN

Figure 1.3 shows the research design.

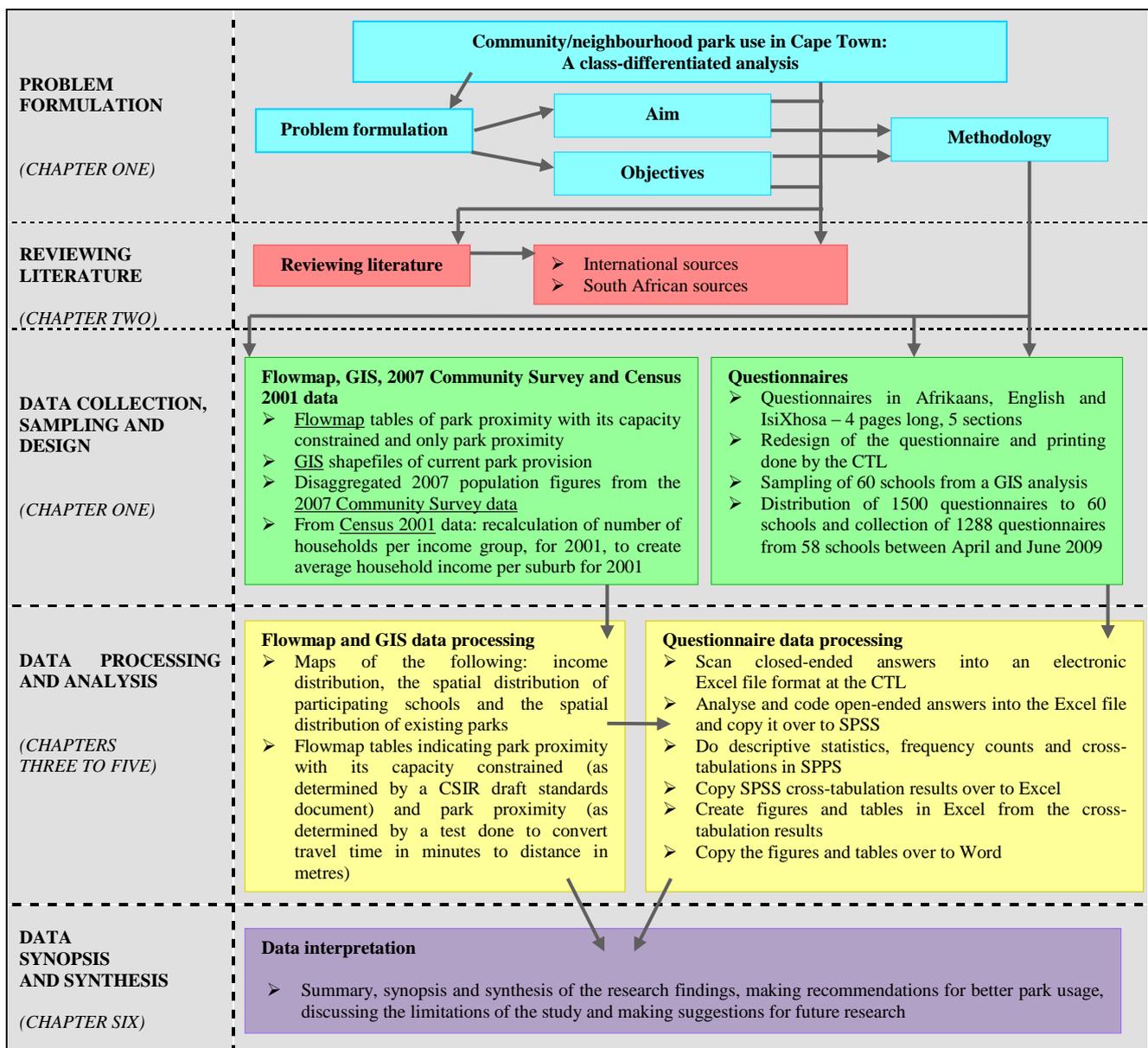


Figure 1.3 The research design

1.6 THESIS STRUCTURE

Chapter 1 described the research process that was followed in order to conduct the research. Chapter 2 gives a thorough overview of the international literature on park usage. Very limited South African sources are included in the park-usage discussions. The literature review lays the foundation for the park issues that were investigated in the City of Cape Town. Chapters 3 to 5 of the thesis contain the research findings and discussions. The focus in Chapter 3 is on establishing park availability per socio-economic area and park availability per distance in the City of Cape Town by means of Flowmap and GIS analyses. As an introduction, Chapter 4 contains an analysis of the respondents' demographic profiles. Furthermore, the class-differentiated investigation is reported on in Chapter 4, which was done to determine the respondents' park usage in the three income groups. An overview of urban national park usage and outdoor recreation options available to the respondents in the three income groups are also examined. Chapter 5 presents an analysis of the respondents' perceptions and preferences of service delivery in general and the delivery of park and recreation services in comparison to other services. The respondents' levels of satisfaction with parks in terms of park management and maintenance are also indicated in Chapter 5, while Chapter 6 concludes the thesis by providing a summary/synthesis of the main elements of park usage discussed in Chapters 3 to 5. Recommendations are also made to the City Parks Department to effectively plan, design, deliver, manage and maintain parks. The research shortcomings and suggestions for future research are also discussed in the last chapter.

CHAPTER 2: INTERNATIONAL EXPERIENCES RELATING TO PARKS: LESSONS FOR SOUTH AFRICA

The overview of literature in Chapter 2 is discussed in the broader context of how class differences influence people's park usage. A park-usage model, designed by Byrne & Wolch (2009), to determine elements influencing people's park usage, is used to discuss categories covering a focus on selected developed and developing countries. The South African literature is integrated into the international literature. Firstly, a scheme is given to establish where community/neighbourhood parks fit into the broader open-space system and a definition of parks (more specifically community/neighbourhood parks) is provided. Secondly, the values and benefits of parks are discussed, followed by the different elements of park usage. The elements of park usage include park users' characteristics, people's actual park usage, a broad tabular summary of the park requirements of park users, park non-use and the nature of the park space itself. The concluding remarks emphasise the relative importance of the literature review on park usage for South Africa.

2.1 INTRODUCTION

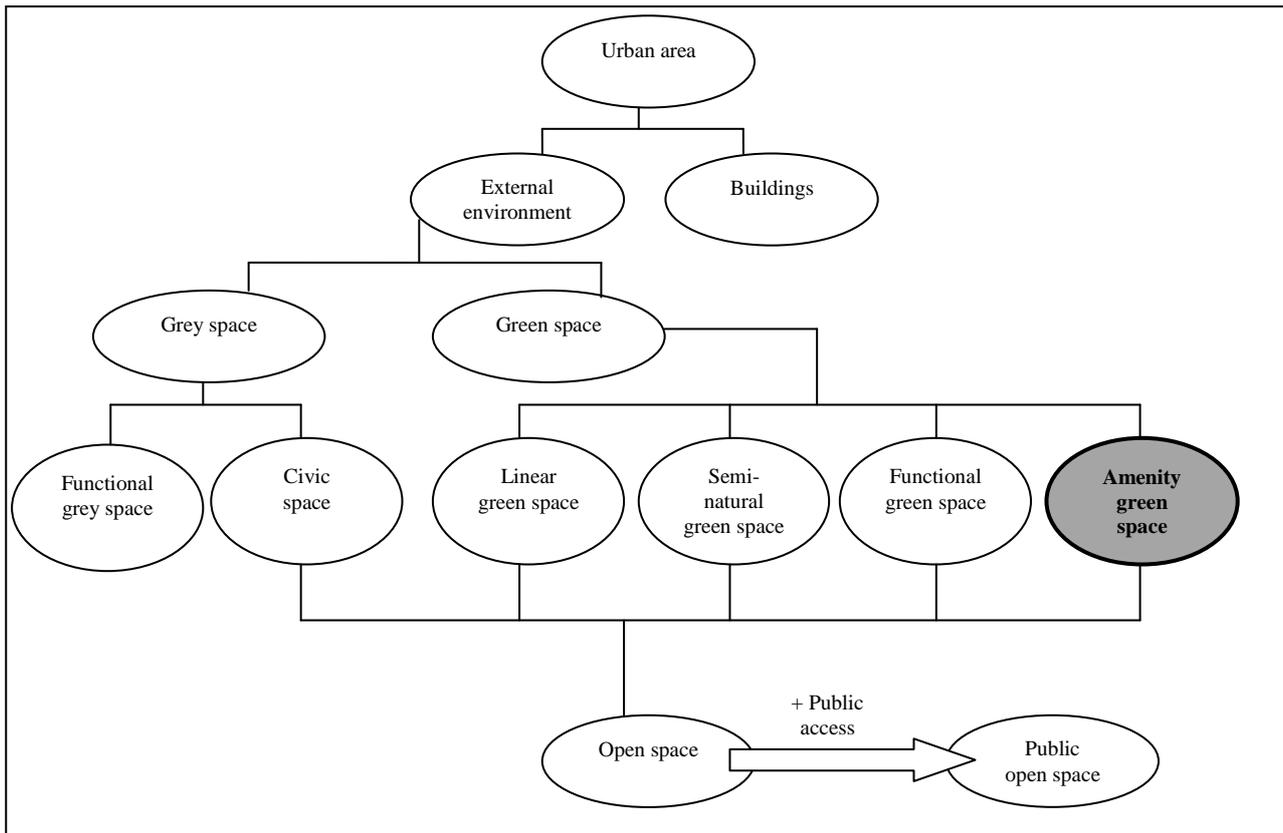
Recreation is one of the basic human needs in order to have a sustainable life (Harvey 1973). The ways in which the government meets these needs determine our physical and mental health. One method by which people can meet these needs is through recreation space in parks. Understandably, communities use parks differently. The park space itself, the nature of the park space and its facilities and the social class characteristics of people all work together to shape people's perceptions of parks, which may determine whether they visit parks or not (Iamtrakul 2005). In order for governments to provide effective and functional parks that everyone may use, it is necessary for governments to understand the aforementioned issues.

2.2 A SCHEME OF URBAN GREEN SPACE

Urban areas consist of the external environment and the built environment (Figure 2.1) (Swanwick, Dunnett & Woolley 2003). The external environment is made up of grey space and green space. Grey space consists of functional space and civic space. Functional spaces have 'hard' surfaces, such as roads and pavements. Civic spaces are areas for public enjoyment, including town squares and plazas (Swanwick, Dunnett & Woolley 2003). On the other hand, green spaces consist of predominantly unsealed, permeable 'soft' surfaces, such as soil, grass, shrubs and trees and it

includes all areas of parks, play areas, green spaces for recreation use and green spaces with other origins (Dunnett, Swanwick & Woolley 2002).

Green space can be divided into four main categories: linear, semi-natural, functional and amenity green space (Dunnett, Swanwick & Woolley 2002; Swanwick, Dunnett & Woolley 2003). Civic space and green space together form open and/or public/open space, which contribute to the amenity of urban landscapes by providing ‘hard’ civic spaces and ‘soft’ green spaces (Figure 2.1).



Source: Swanwick, Dunnett & Woolley (2003: 97).

Figure 2.1 A thematic scheme of how urban green space fits into the urban environment

The amenity green space is of particular interest for the purpose of the literature review, because it contains all of the land that is publicly or privately owned that primarily has an amenity function, be it through visual amenity or recreation amenity (Dunnett, Swanwick & Woolley 2002). Amenity green space consists of private (domestic), incidental and recreation green space (Dunnett, Swanwick & Woolley 2002). *Private (domestic) green space* is not publicly accessible. *Incidental green space* includes left over green space between housing and other forms of development. Consequently, it is publicly owned, managed and accessible because it provides a green landscape backdrop to the urban environment, but it does not have a clear recreation or habitat function

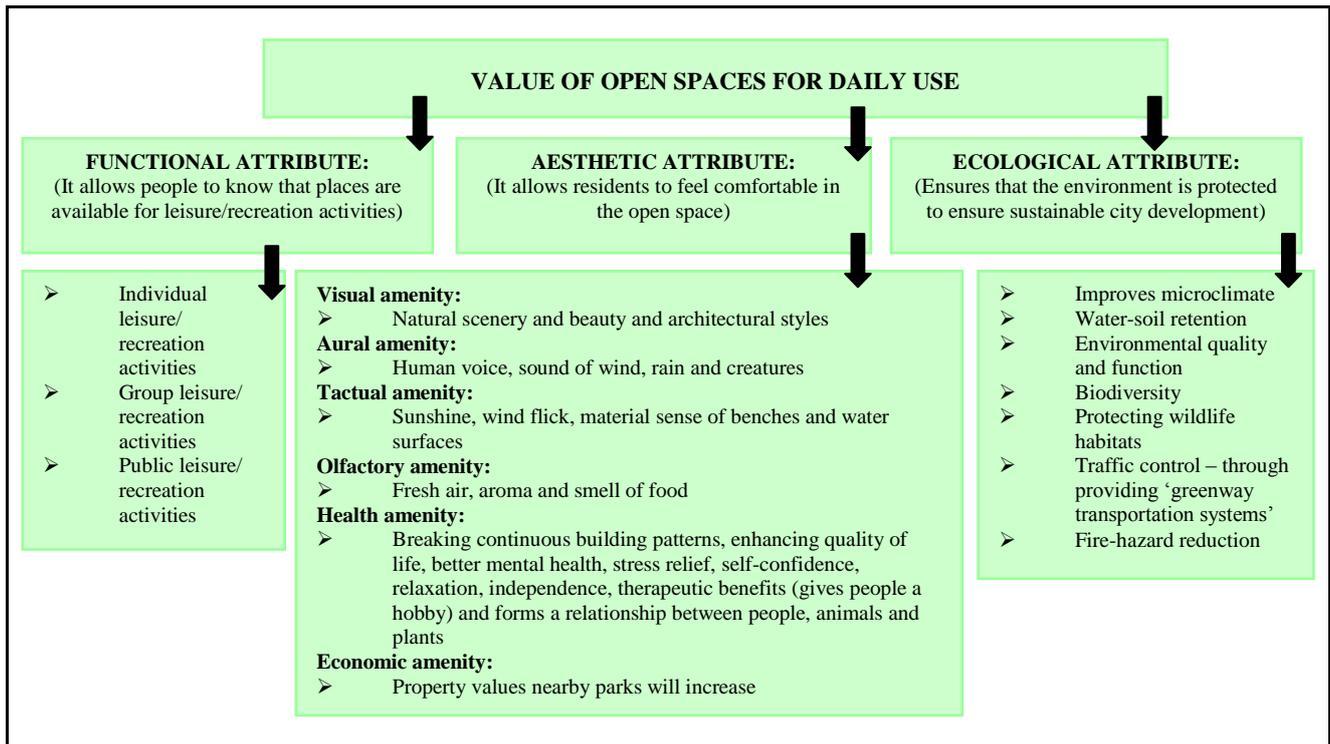
(Dunnett, Swanwick & Woolley 2002). *Recreation green space* comprises of outdoor sports areas, informal recreation areas, play areas and parks and gardens. *Outdoor sports areas* provide sports pitches and sports fields. Outdoor sports areas can be located in parks, but may be separate, for example in the case of golf courses. *Informal recreation areas* consist mainly of grass and have limited facilities. However, in some cases informal recreation areas may also have trees, a play area, paths, and sometimes toilets and a parking area. The public is allowed to relax in informal recreation areas (Dunnett, Swanwick & Woolley 2002). *Play areas* have various equipment and facilities and are aimed at children's play. Play areas may occur separately, but could also be part of outdoor sports facilities, informal recreation areas and parks. *Parks and gardens* are created for public access and enjoyment. It combines landscape, facilities, buildings and/or sports facilities and/or play areas and/or community gardens (Dunnett, Swanwick & Woolley 2002).

Parks and gardens are further divided into a four-level hierarchy of parks based on size and attraction value, which consists of principal/city/metropolitan parks, district parks, neighbourhood parks and local parks (Swanwick, Dunnett & Woolley 2003). Principal/city/metropolitan parks are generally more than eight hectares in extent and have a city-wide catchment area. These parks are varied physical resources and usually have a range of facilities. District parks are up to eight hectares in size with a catchment area of 1500-2000 metres. District parks normally have a mixture of landscape features and facilities, such as sports fields, playing fields and play areas (Swanwick, Dunnett & Woolley 2003). Neighbourhood parks are up to four hectares in extent and serve a catchment area between 1000-1500 metres with both landscape features and facilities. Local parks are up to 1.2 hectares in size, serving a catchment area between 500-1000 metres, and consist of play areas, informal green areas and landscape features, but lack other facilities (Swanwick, Dunnett & Woolley 2003). When the word 'parks' is used in the literature review, it refers to the aforementioned neighbourhood and local park definitions.

2.3 VALUE AND BENEFITS OF PARKS

Benefits that people receive from parks may determine whether they are used or not as well as the frequency with which they are used. Parks have the potential to benefit people by providing a high-quality life and contributing to a sustainable city (Byrne & Wolch 2009; Cranz & Boland 2004; Shafer, Lee & Turner 2000). To accomplish sustainability, there has to be a balance between economic, environmental and social aspects of parks (Shafer, Lee & Turner 2000). When the balance is achieved, people see parks as a holistic entity, which may influence people's personal and social perceptions of parks and in turn determine the frequency of use. An increase in park use,

may improve quality of human life, which is an important component of sustainable development and a sustainable city (Chiesura 2004). Parks furthermore provide opportunities for “social interactions, serve as reminders of childhood memories and serve as opportunities for people to escape from urban life. The most valued parks are the intimate and familiar ones which play a part in people’s daily lives rather than distant ones far from home” (Burgess, Harrison & Limb 1988: 459-460). Three attributes make up the value of open spaces (such as urban parks): functional, aesthetic and ecological attributes (Figure 2.2) (Shi et al. 2006).



Adapted from: ⁵

Figure 2.2 The value of open spaces through functional, aesthetic and ecological attributes

Figure 2.2, and the description of benefits that follows, show that although people may voice or categorise benefits that they receive from parks differently, the actual benefits people receive from parks remain universal. Park benefits remain the same regardless of the geographic location of the country. People may value parks and receive benefits from it even though they do not actually make use of it (Azuma et al. 2006). The “knowledge that such parks exist and could function as a means to escape from the city life is important” (Wolf 2005: 4). Simply “knowing it is there and seeing the contribution that it makes to the urban landscape – as well as its use for recreation and enjoyment” may be enough benefit to people already (Swanwick, Dunnett & Woolley 2003: 102). The literature

⁵ Briffett et al. (2004); City of Cape Town City Planner’s Department (1997); Cranz & Boland (2004); Jim & Chen (2006); Kang (2006); More (1990); Nighat et al. (2005); Shi et al. (2006: 1377).

broadly provides eight park benefit categories: economic, environmental, transportation, aesthetic and amenity, sense of place, restorative, spiritual and other benefits.

- *Economic benefits* include aspects such as on-site benefits, which are created by direct employment and tax increases, and off-site benefits, which include the effect of parks on hedonic property values (Byrne & Wolch 2009; Del Saz Salazar & Garcia Menéndez 2007; Kaczynski et al. 2009; Shafer, Lee & Turner 2000). Hedonic property values are indicated by market values of houses and people's spending that increase if parks are nearby (Kang 2006; Koomen et al. 2005; Swanwick, Dunnett & Woolley 2003; Wolf 2005). Other economic benefits include attracting new business to an area and consequently creating an increased tourism potential and revenue (Azuma et al. 2006; Byrne & Wolch 2009; Dunnett, Swanwick & Woolley 2002; Hansen 2006).
- More parks and vegetation can also reduce the heat island effect by reducing carbon dioxide emissions. *Environmental benefits* include, among other things, reducing air pollution (Azuma et al. 2006; Cranz & Boland 2004; Hansen 2006; Swanwick, Dunnett & Woolley 2003), adjusting local temperatures, ameliorating airflow (Azuma et al. 2006; Byrne & Wolch 2009; Kang 2006) and enhancing food security through community gardens in parks (Byrne & Wolch 2009; Saldivar-Tanaka & Krasny 2004).
- Well-connected parks and open spaces can also function as a *greenway transportation system* to link parks and open spaces in cities. Such greenway transportation systems can provide people with shortcuts that they can take to work, school or shops (Furuseh & Altman 1991; Shafer, Lee & Turner 2000).
- *Aesthetic and amenity benefits* include the following: parks allow for adventure, fun, play and imaginative recreation (Burgess, Harrison & Limb 1988; Seeland, Dübendorfer & Hansmann 2009; Van Herzele & Wiedemann 2003) and parks give people opportunities to escape the built environment temporarily (Azuma et al. 2006; Burgess, Harrison & Limb 1988; Del Saz Salazar & Garcia Menéndez 2007; Dunnett, Swanwick & Woolley 2002) by providing an opportunity for people to forget their daily worries and for people to step out of the routine of their daily lives (Chiesura 2004; Hansen 2006; Ho et al. 2005; Wolf 2005). Furthermore, parks give a feeling of wellness when people are able to touch, smell, see and hear elements of the natural world (Azuma et al. 2006; Morris 2003; Wolf 2005).

- The presence of parks gives residents pride in their community and helps to establish a community identity and *sense of place* (Azuma et al. 2006; Byrne & Wolch 2009; McInroy 2000), which is expressed through shared time in the form of a shared territory. The presence of parks furthermore provides *restorative* and *spiritual benefits* (Byrne & Wolch 2009; Morris 2003; Sasidharan, Willits & Godbey 2005; Tinsley, Tinsley & Croskeys 2002). The restorative value of parks restores people's equilibriums, compensates for the stress of daily life (Burgess, Harrison & Limb 1988; Del Saz Salazar & Garcia Menéndez 2007; Ho et al. 2005; Shafer, Lee & Turner 2000), provides health benefits (if people use parks for exercise) (Alves et al. 2008; Hansen 2006; Kaczynski et al. 2009; Swanwick, Dunnett & Woolley 2003), enhances people's overall quality of life and has a positive influence on longevity of the elderly (Alves et al. 2008; Azuma et al. 2006; Wolf 2005).
- *Spiritual benefits* are defined as the notion that nature is a mystic energy, giving sense to life and acting as the driving force behind the human existence (Azuma et al. 2006; Burgess, Harrison & Limb 1988). Spiritual value is expressed in parks through them being the value and essence of life, providing a space for freedom, happiness, reflection, meditation, silence, beauty and tranquillity to occur (Cranz & Boland 2004; Hansen 2006; McInroy 2000; Van Herzele & Wiedemann 2003).
- *Other benefits* of parks include the ability to positively influence people's behaviour by creating neutral ground for community spirit (Dunnett, Swanwick & Woolley 2002; McInroy 2000) and interaction, inclusion and companionship to occur (Alves et al. 2008; Chiesura 2004; Hansen 2006; Seeland, Dübendorfer & Hansmann 2009). Parks can also contribute to child development, education (Dunnett, Swanwick & Woolley 2002; Ho et al. 2005; Morris 2003; Swanwick, Dunnett & Woolley 2003), job creation, tourism potential (Chiesura 2004; Dunnett, Swanwick & Woolley 2002; Swanwick, Dunnett & Woolley 2003) and political green activism (Dunnett, Swanwick & Woolley 2002; Swanwick, Dunnett & Woolley 2003).

2.4 THE GEOGRAPHY OF CLASS AND PARK USE

Before discussing the different themes of park usage, it is firstly important to examine the notion of social class, which presented itself throughout the analysis in the study as a compelling indicator of park usage.

People in society have “different statuses, which result in social differentiation. Different statuses become organised in a hierarchical social system called social stratification. Social stratification means that groups have different access to resources, power and social worth. Social stratification is a system of structured social inequality” (Anderson & Taylor 2004: 252). Contemporary societies have multiple factors interacting to create social strata. One of the most fundamental organisational structures of society, which also acts as a factor to influence social stratification, is class (Anderson & Taylor 2004; Calvert 1982).

Social class refers to the “social structural position within the stratification system relative to the economic, social, political and cultural resources of society. Class determines the access different people have to these resources and puts groups in positions of privilege (‘haves’) and disadvantage (‘have nots’)” (Anderson & Taylor 2004: 252-254). Members of a class have similar life chances and life prospects. The most important indicators of class are income and wealth. Other class indicators are education, occupation place of birth, place of residence, race, ethnicity, gender and age among other things. Income, education and occupation can also together determine one’s socio-economic status (Anderson & Taylor 2004).

The social theorist Max Weber described the consequences of stratification in terms of life chances determined by class (the economic position in society), status/prestige (the cultural/social position in society) and party/power (the political position in society). He believed that the economic function is the most important, but that the cultural/social and political dimensions also have a role to play, because they are aggregated from the economic dimension (Anderson & Taylor 2004; Stark 1992; Wright 2005). In essence, “what you have determines what you get” (Wright 2005: 22). The statement means the opportunities people have, because they belong to a particular class, affect their standards of living and determine how well they are served by social institutions (Anderson & Taylor 2004; Wright 2005).

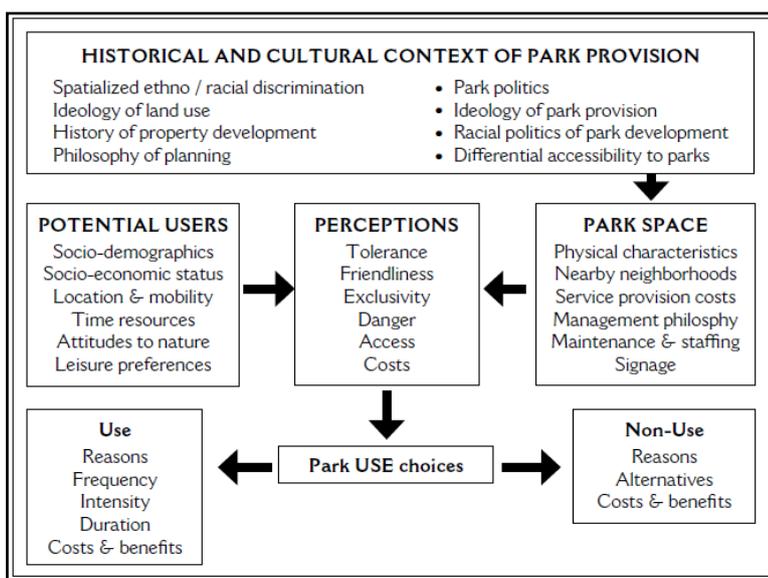
Ultimately, the aforementioned means that class can be used to explain various features of park usage and the differences that occur between how and why people use parks or not. Six features/differences in park usage can be distinguished based on the work of Wright (2005). The six features/differences in park usage include the following: (1) class determines people’s material standards of living, which influence how people use parks; (2) classes are social categories through which people’s experiences and identities are constructed in a system of economic stratification. These experiences and identities may establish people’s perceptions about park usage; (3) the resources available to people (especially income-generating resources) may shape the opportunities

they have to use parks; (4) class (economic) differences create conflicting interests in parks; (5) economic differences between people were established by the historical variation in inequality. Economic differences between people will determine people's access to park services; (6) a social class change is needed to end exploitation and domination so that everyone has equal access to park usage of their choice (Wright 2005). The geography of class is therefore concerned with 'class-as-position'. Territories (parks) are analysed by the class characteristics of their resident populations and how these class characteristics (differences) influence park usage (Pain et al. 2001).

2.5 ELEMENTS OF PARK USAGE

The park-use model of Byrne & Wolch (2009: 8-10) incorporates the following four elements of park use (Figure 2.3):

“(1) The socio-demographic characteristics of park users and non-users; (2) individual perceptions of park spaces, such as accessibility, safety, sense of welcome, constructed by personal characteristics and the park's political ecology, history and cultural landscape; (3) the historical and cultural landscapes of park provision, such as discrimination and the politics behind land use practices, park design and development; and (4) the political ecology and amenities of the park itself, for example, landscape design, vegetation, facilities and management regimes.”



Source: Byrne & Wolch (2009: 9).

Figure 2.3 Elements influencing people's park usage

Park usage is determined by different socio-demographic variables, including age, gender, race, ethnicity, household composition, socio-economic factors (such as education, income levels, disability and home ownership), residential locations, physical mobility, time resources, attitudes towards nature and leisure preferences (Byrne & Wolch 2009). The frequency and duration of park usage are also influenced by the personal attributes, motivations and perceptions of people about park spaces. Park non-use may be caused by the racial, social, historical, cultural, ecological and economic context of park users, and the conditions that exist in parks. The park space itself emphasises the physical characteristics and design of parks, but also includes the level of park service provision and sufficient park management and maintenance (Byrne & Wolch 2009).

As mentioned before, park user characteristics and park features work together to affect perceptions of parks and the people who use them. These perceptions may influence whether people use parks or not (Byrne & Wolch 2009; Lindsey, Maraj & Kuan 2001). Different people may perceive the same park differently (Cranz & Boland 2004). However, what remains important across all ages, genders, races, ethnicities, language preferences, levels of education, income and occupation is that “parks must be seen as safe, welcoming, well maintained, physically appealing, catering for a range of activities and fostering social interaction” in order for everyone in society to use it effectively (Byrne & Wolch 2009: 9). As mentioned, the model (in Figure 2.3) is used to discuss the remaining sections in the literature review: park users’ characteristics, how park users use parks, park non-use and the dynamics of the park space itself. However, class differences should also be taken into consideration, because it is the binding factor that influences all aspects of park usage, not only in the literature review, but also in the thesis.

2.5.1 Park users

This section describes who the potential park users and non-users are. Socio-demographic differences occur between park users and non-users. Demographic differences also determine the frequency of park use, which could be determined by the distances people are willing to walk/travel to get to parks and the mode of transport people use to get to parks (Zhang & Gobster 1998). Diverse people use parks in diverse ways (Byrne & Wolch 2009; Iamtrakul 2005; Lindsey, Maraj & Kuan 2001).

2.5.1.1 Developed countries

The literature significantly identifies younger children, between the ages of one and 13, as being the

age group that uses parks the most. Younger children between one and five years old are accompanied to parks by older children/siblings and/or by their parents/caretakers (Burgess, Harrison & Limb 1988; Kaczynski et al. 2009; Seeland, Dübendorfer & Hansmann 2009; Tucker, Gilliland & Irwin 2007). Teenagers use parks less than younger children, because parks mostly provide play equipment for younger children. More challenging facilities should be provided for teenagers, such as skateboard and biking facilities, to ensure that they would use parks more often (Dunnett, Swanwick & Woolley 2002; Seeland, Dübendorfer & Hansmann 2009; Zhang & Gobster 1998). Young adults and middle-aged people, usually between the ages of 25 and 44 years, use parks mainly to accompany young children for safety reasons (Burgess, Harrison & Limb 1988; Dunnett, Swanwick & Woolley 2002; Furuseth & Altman 1991; Hansen 2006; Sanesi & Chiarello 2006). However, some authors indicate that younger adults are less likely to visit parks due to a lack of time availability (Kaczynski et al. 2009; Mowen, Payne & Scott 2005). As people get older, their participation in physical outdoor activities decreases (Payne, Mowen & Orsega-Smith 2002). The elderly are identified as significant under-users. If parks are further away from the homes of the elderly, some of the elderly may make fewer trips to parks, because they prefer to visit parks that are located within at least 15 minutes' walk from their homes (Alves et al. 2008; Dunnett, Swanwick & Woolley 2002; Mowen, Payne & Scott 2005; Pincetl & Gearin 2005). In the studies of Alves et al. (2008); Hansen (2006); Tinsley, Tinsley & Croskeys (2001); Zhang & Gobster (1998), the elderly normally visit parks for shorter periods. However, if the elderly in the aforementioned studies are grandparents, they may accompany their grandchildren to parks and consequently visit parks for a longer period.

The literature differs on the role of *gender* and park usage. Some sources indicate men as the dominant users, while women use parks less due to their responsibilities and fears (Dunnett, Swanwick & Woolley 2002; Madge 1997; Page, Nielsen & Goodenough 1994). Women's responsibilities include, among other things, having to work while also taking care of children and the house. Women also feel they need men to accompany them to parks in order to be safe. Therefore, men sometimes use parks more (Crosby & Rose 2008; Dunnett, Swanwick & Woolley 2002; Giles-Corti et al. 2005; Mowen, Payne & Scott 2005). Other sources state that park users are mostly middle-aged and married women. Furthermore, women's responsibilities of childcare create more favourable opportunities for women to accompany their young children to parks (Burgess, Harrison & Limb 1988; Ho et al. 2005; Kaczynski et al. 2009; Seeland & Nicole 2006). In addition, if parks provide better and safer opportunities for movement, women are more likely to visit parks more frequently (Furuseth & Altman 1991).

Race, ethnic differences and language preferences can determine the *group sizes* of people who visit parks (Byrne & Wolch 2009; Tierney, Dahl & Chavez 2001; Tinsley, Tinsley & Croskeys 2002; Zhang & Gobster 1998). In the study of Payne, Mowen & Orsega-Smith (2002), black people have closer family and relationship ties and have multiple generations living together. Social interaction is important to black people and they go to parks in bigger family or friend groups (Byrne & Wolch 2009; Gobster 2002; Ho et al. 2005; Payne, Mowen & Orsega-Smith 2002). In contrast, white people generally visit parks alone or in pairs (Byrne & Wolch 2009; Gobster 2002; Ho et al. 2005; Tinsley, Tinsley & Croskeys 2002).

However, in some instances, *race* and *ethnic differences* determine park usage. Ethnic minorities are under-represented in their use of parks (Dunnett, Swanwick & Woolley 2002; Madge 1997; Morris 2003; Rishbeth 2001). One example of this under-representation is the lack of access that low-income Arab earners in Israel have to parks. In contrast, Jewish people are more affluent and have better access to parks. The main reason for this inferiority between these two groups is not their income differences, but their ethnic identity (Omer & Or 2005). Diverse ethnic origins also place a *language* barrier on the use of parks (Finney & Rishbeth 2006; Gobster 2002; Ho et al. 2005; Rishbeth 2001). Non-native language speakers will usually go to parks in slightly larger *groups* of between eight and 10 people, because if they encounter problems there are people who will understand them (Finney & Rishbeth 2006; Gobster 2002; Ho et al. 2005). Most people do not go to parks alone, due to a fear of someone attacking them – racially, sexually or physically (McCormack et al. 2006; Sanesi & Chiarello 2006; Seeland & Nicole 2006). Most people go with a group of friends, a spouse or partner, children or pets. Students use parks almost exclusively with their friends and housewives go with their children. When people do go to parks alone, they usually meet with someone at the parks (Sanesi & Chiarello 2006; Seeland, Dübendorfer & Hansmann 2009).

When looking at *education, income and occupation* as measures to determine park users' and non-users' demographic profiles, affluent and well-educated people have more resources to visit parks more often. The resources include more money and private transport in the form of privately owned cars (Furuseth & Altman 1991; Mowen, Payne & Scott 2005; Omer & Or 2005; Tierney, Dahl & Chavez 2001). Affluent and well-educated people normally buy bigger homes, with private gardens. There will be more parks nearby their homes and they will have better access to parks (Burgess, Harrison & Limb 1988; Pincetl & Gearin 2005; Omer & Or 2005; Syme, Fenton & Coakes 2001; Zhang & Gobster 1998). The majority of park users in Britain, for example, have a tertiary degree and are in management and technical positions (Giles-Corti et al. 2005; Ravenscroft

& Markwell 2000). Richer people are more likely to use formal facilities, beaches and rivers, but park usage does not increase with higher incomes (Crosby & Rose 2008; McCormack et al. 2006). In contrast, the aforementioned authors found that lower-income people predominantly use parks. Some affluent and well-educated people may not always have time to visit parks due to work obligations. When the more affluent want to relax, they use their private gardens (McCormack et al. 2006). In addition, homeless people also use parks to legitimate their role in society. Parks become the only areas where they can express themselves and be safe (Mitchell 1995). Educational level can further determine activities in which people partake in parks. Well-educated people prefer more active activities compared to less educated people, who prefer more passive activities (Payne, Mowen & Orsega-Smith 2002; Tierney, Dahl & Chavez 2001; Zhang & Gobster 1998). The theory that describes demographic characteristics in terms of education, income and occupation is known as the marginality thesis (Zhang & Gobster 1998). For more information on how the marginality thesis applies to park usage, refer to the section on structural constraints to park usage (Section 2.5.3.3).

The *frequency of park usage* can be described by the *distances* people have to walk/travel to get to parks and the *mode of transport* used to get there. Ideally, parks should be within 5-15 minutes' walk from homes, with the majority of people preferring to walk less than 10 minutes to reach parks (Alves et al. 2008; Hansen 2006; Iamtrakul 2005; McCormack et al. 2006; Sanesi & Chiarello 2006). Alternative modes of transportation to parks include bicycles, cars, busses and taxis (Burgess, Harrison & Limb 1988; Hansen 2006; Iamtrakul 2005; McCormack et al. 2006). People do not walk/travel far to visit parks and they mostly use the local parks close to their homes. Hence, a clear distance decay function exists, whereby the appeal of parks will dramatically decline with increasing distance. If people stay further away from parks, they use those parks less (Burgess, Harrison & Limb 1988; Furuseth & Altman 1991; Hansen 2006; Kaczynski et al. 2009). In developed countries, people are willing to travel longer than 30 minutes to reach parks if there are no closer alternatives and the parks further away provide more facilities to suit a variety of needs (Hansen 2006; McCormack et al. 2006; Ravenscroft & Markwell 2000; Zhang & Gobster 1998).

White people in Britain, the United States of America and Canada have significantly less travel time, through walking or cycling, to get to parks. White people will visit parks virtually on a daily basis but for shorter periods (Gobster 2002; Ho et al. 2005; Tinsley, Tinsley & Croskeys 2002; Tucker, Gilliland & Irwin 2007). Not every neighbourhood of minority groups has parks. Minority groups have to travel further, usually by car, bus or taxi, to get to parks. Minority groups use parks less frequently, but stay for longer periods (Gobster 2002; Ho et al. 2005; Pincetl & Gearin 2005;

Tierney, Dahl & Chavez 2001). Disabled people also take longer to get to parks because they have poor mobility and/or they do not have family members that could take them to parks (Seeland & Nicole 2006).

According to Ravenscroft & Markwell (2000), there are no differences between weekday and weekend visits. However, other authors (Dunnett, Swanwick & Woolley 2002; Page, Nielsen & Goodenough 1994; Sanesi & Chiarello 2006; Seeland, Dübendorfer & Hansmann 2009) disagree and state that the employed population, women, younger children, white people and minority groups visit parks at least once a week, with a peak over the weekends when they have more free time available. The aforementioned authors also indicate that housewives and students use parks daily or several times a week, but the elderly only use parks once or twice a week. Parks are mostly used in the summer and in the late morning and afternoon. People spend between 15 and 60 minutes in parks. Young people stay in parks for longer. Adults will only stay in parks for a short while, but when they accompany children, they may stay longer. The elderly visit parks for shorter periods (Dunnett, Swanwick & Woolley 2002; McCormack et al. 2006; Page, Nielsen & Goodenough 1994; Seeland & Nicole 2006).

2.5.1.2 Developing countries

The literature on parks is mainly restricted to developed countries. There is, however, some literature from developing countries such as China, Cyprus, Mexico, Pakistan, Singapore, Turkey and South Africa. The characteristics of park users in developing countries are very similar to those in developed countries, although some minor differences do occur.

In developing countries, park users are mostly young to middle-aged adults, between the *ages* of 19 and 44 years. Park use decreases as age increases. The majority of park users are men (Briffett et al. 2004; Nighat et al. 2005; Yilmaz, Zengin & Yildiz 2007), except in the case of Pasaogullari & Doratli's (2004) study, which indicates that more women use parks in Cyprus.

The literature on developing countries differs from that on developed countries based on *education*, *income* and *ethnic status* as demographic factors, which influences park usage. High school and university graduates from developing countries use parks slightly more than primary school graduates do, in comparison to developed countries, where higher educated people mostly use parks (Nighat et al. 2005; Pasaogullari & Doratli 2004; Yilmaz, Zengin & Yildiz 2007).

The literature on developed countries concentrates mainly on whether high- or low-income group people use parks more. Some sources claim that low-income people use parks more (Nighat et al. 2005; Pasaogullari & Doratli 2004) in Pakistan and Cyprus, while Gedikli & Ozbilen (2004) believe that the higher the income in Turkey, the more people may participate in recreation activities. In contrast to developed countries, more low-income people in Turkey have private gardens, because parks are usually too far away (Erkip 1997). As opposed to the literature on developed countries, the literature on developing countries does not focus on race, language preferences and group sizes as being significant demographic factors that influence park usage (Nighat et al. 2005; Yilmaz, Zengin & Yildiz 2007).

The literature does not give significant information on the *frequency of park use* either. People use parks in Pakistan mostly on a daily basis for up to one hour (Nighat et al. 2005). Park visitors in Turkey mostly use parks during weekdays in summer months, for a period of one to two hours per visit (Gedikli & Ozbilen 2004). Park accessibility in terms of time differs, and residents in general take longer than 15 minutes to reach parks – whereas residents from developed countries consider 0-15 minutes to be the appropriate time to reach parks (Pasaogullari & Doratli 2004).

In the studies of Nembudani (1997) and Walters (2005), children use parks more frequently, on a daily or weekly basis, than adults. Adults in Walters's (2005) study sometimes accompany children to parks and thus also make use of parks. However, Nembudani's (1997) study indicates that none of the other age categories uses parks. A possible explanation could be the racial composition of the suburbs, as caused by the apartheid legacy. Walters's (2005) study was conducted in Bellville in the Western Cape, which is considered a predominantly white area, while Nembudani's (1997) study was conducted in Gugulethu, a black township in the Western Cape. Black people were often not socialised to participate in outdoor recreation activities during apartheid (Nembudani 1997; Wilson & Hattingh 1992). In terms of park proximity, parks must be located within 10-15 minutes' walk, or within 500 metres from homes, to be used regularly (City of Cape Town City Planner's Department 1997; CSIR 2000; Spocter 2008; Walters 2005).

2.5.2 Park-use activities

People in developed and developing countries engage in similar activities in parks. The literature divides recreation into two broad categories: active and passive recreation. Active recreation is defined as activities in which people are physically active and mobile that can be done individually or in groups (Burgess, Harrison & Limb 1988; Ho et al. 2005; Iamtrakul 2005; Sasidharan, Willits

& Godbey 2005). Passive recreation is activities that provide mere visual, emotional, socialising or relaxing enjoyment and it includes mostly stationary activities that are investigative and acquisitive in nature (Burgess, Harrison & Limb 1988; Ho et al. 2005; Iamtrakul 2005; Sasidharan, Willits & Godbey 2005). Table 2.1 shows a typology of international park usage. The activities in which people partake in parks are also the reasons why people visit parks. Table 2.2 indicates how age, gender and race differences influence the choice of recreation activities in parks of people in developed countries. The literature of developing countries does not contain any thorough information that describes how age, gender and race differences influence the choice of recreation activities of people.

Table 2.1 Activity types⁶

Typology of park usage	
Passive recreation	Miscellaneous activities
<ul style="list-style-type: none"> ➤ Dating ➤ Escaping/getting away from it all / the city ➤ Festivals/parties ➤ Getting fresh air ➤ Outing with family/friends ➤ Photography ➤ Picnics/barbeques ➤ Sightseeing/hanging out ➤ Sitting/relaxing/resting ➤ Studying/working ➤ Sunbathing ➤ Taking children on an outing ➤ Talking/socialising ➤ Viewing the landscape/nature/gardens/trees ➤ Watching organised sports ➤ Watching people/opposite sex 	<ul style="list-style-type: none"> ➤ Birding/feeding birds ➤ Drug using ➤ Educational school trips ➤ Events: music/crafts/funfairs/fireworks/concerts/circus ➤ Exhibitionism ➤ Experiencing wildlife ➤ Flying kites ➤ Museums/conservatory ➤ Place to eat lunch during work hours ➤ Rites of passage, such as weddings, funerals and birthday parties ➤ Sexual gratification (mostly in the form of sexual attacks) ➤ Taking a shortcut / using parks as a route to work/school/shops (commuting through parks) ➤ Thievery ➤ Used by homeless people and vagrants ➤ Used by squatters as a home ➤ Using parks as community gardens to act as community development ➤ Voyeurism ➤ Watching zoo animals ➤ Working/studying
Active (individual activities)	Active (group activities)
<ul style="list-style-type: none"> ➤ Bicycling ➤ Exercising ➤ Jogging/running ➤ Playing games (alone) ➤ Rollerblading/skateboarding ➤ Walking ➤ Walking the dog 	<ul style="list-style-type: none"> ➤ Children playing ➤ Playing frisbee ➤ Playing games ➤ Playing sports (such as soccer, baseball, basketball, football, golf, tennis, volleyball) ➤ Skateboarding/biking ➤ Water sports (such as swimming, fishing, boating, watching boats)

Compiled from:⁷

The more activities parks offer people, the more reasons and opportunities people will have to go to

⁶ Some of the activities in Table 2.1 can be placed in more than one category.

⁷ Alves et al. (2008); Briffett et al. (2004); Burgess, Harrison & Limb (1988); Byrne & Wolch (2009); Chiesura (2004); Dunnett, Swanwick & Woolley (2002); Erkip (1997); Giles-Corti et al. (2005); Gobster (2002); Hansen (2006); Hernandez-Bonilla (2008); Iamtrakul (2005); Kang (2006); McCormack et al. (2006); More (1990); Nighat et al. (2005); Page, Nielsen & Goodenough (1994); Saldivar-Tanaka & Krasny (2004); Sanesi & Chiarello (2006); Seeland & Nicole (2006); Shi et al. (2006); Speller & Ravenscroft (2005); Swanwick, Dunnett & Woolley (2003); Tinsley, Tinsley & Croskeys (2002); Zhang & Gobster (1998).

parks and participate in these activities. Consequently, park use will increase (Pasaogullari & Doratli 2004). Activities in which people engage in parks can also offer people an opportunity to encounter other community members, which can enhance social interaction and a sense of community among them. Social interaction consists of planned social acts, or activities in which people participate in parks, which benefit people and form a social network of intimate neighbouring relations (Kang 2006). People with different demographic characteristics use parks differently, which is evident from the aforementioned sections on park users and park-use activities. Table 2.3 provides a broad overview of the open-space (park) requirements of identifiable park users.

Table 2.2 The influence of age, gender and race on determining recreation activities in parks in developed countries

Factors affecting activities	Active/passive recreation	People's recreation preferences that influence the activities in which they participate in parks
Age		
One to eight year-olds	➤ Usually active recreation	➤ Play games like 'catch-up' ➤ Play on play equipment such as swings, slides and seesaws ➤ Swim
Older children	➤ Usually active recreation	➤ Play informal sports
Unmarried adults	➤ Usually active recreation	➤ Go for a walk
Adults with younger children	➤ Usually passive recreation	➤ Accompany children to parks ➤ Sit, watch children and talk ➤ Take shortcuts to work
Older adults	➤ Passive or active recreation	➤ Accompany grandchildren to parks ➤ Play board games ➤ Sit on benches ➤ Some prefer active recreation through walking to parks, if it is not too far away
Gender		
Male	➤ Usually active recreation	➤ Prefer going to parks alone or with peers to do sports or to walk ➤ Take shortcuts to work
Female	➤ Usually passive recreation	➤ Usually engaged in stationary activities associated with childcare and family groups
Race		
Black	➤ Usually passive recreation, but sometimes active recreation	➤ In the case of physical activity, prefer organised recreation, such as sport ➤ Prefer areas with amenities and facilities in the parks such as picnic spots ➤ Regard social interaction, such as talking and socialising, as very important
White	➤ Usually active recreation, but sometimes passive recreation	➤ In the case of passive recreation, prefer nature-based activities ➤ Prefer more individual active recreation in the form of walking and jogging

Compiled from: ⁸

⁸ Byrne & Wolch (2009); Gobster (2002); Henderson et al. (2001); Payne, Mowen & Orsega-Smith (2002); Sasidharan, Willits & Godbey (2005); Tinsley, Tinsley & Croskeys (2002); Tucker, Gilliland & Irwin (2007); Zhang & Gobster (1998).

Table 2.3 The open-space (park) requirements of identifiable user groups

Open-space (park) requirements of identifiable user groups	
Two to five year-old children	Six to 12 year-old children
Requirements: <ul style="list-style-type: none"> ➤ Accessible play areas to play mostly on a daily basis ➤ Children need to feel secure in parks 	Requirements: <ul style="list-style-type: none"> ➤ Accessible play areas to play, mostly on a daily basis ➤ Play in groups ➤ Play needs to be stimulating and adventure-orientated
13 to 19 year-old teenagers and young adults	Adults
Requirements: <ul style="list-style-type: none"> ➤ Active engagement in the form of sports and team games ➤ Passive recreation – mostly to engage with people or to be alone ➤ Play equipment is not important, but areas to sit and talk are important 	Requirements: <ul style="list-style-type: none"> ➤ Meeting with friends and family in parks are very important ➤ Require areas for children to play ➤ They require areas that are safe
The elderly	Women
Requirements: <ul style="list-style-type: none"> ➤ Accessible parks, because they cannot walk so far ➤ Areas to sit are important, usually nearby park entrances ➤ Passive engagement with other people ➤ They visit on a routine manner, usually in the morning and early afternoon when there are not many children around 	Requirements: <ul style="list-style-type: none"> ➤ Hard pathways to push prams ➤ Parks should have enough age-appropriate equipment for children, because women have to take care of them ➤ They need to feel safe and have a sense of control of being able to orientate themselves to be able to leave the space quickly if necessary
Disabled people	Vagrants
Requirements: <ul style="list-style-type: none"> ➤ Hard pathways that have at least a 1:12 gradient and are 90 centimetres wide 	Requirements: <ul style="list-style-type: none"> ➤ Seating areas and soft places for them to sleep at night
Workers	Abakhwetha (specifically in Cape Town)
Requirements: <ul style="list-style-type: none"> ➤ They require sunny as well as shady places ➤ Workers use parks for active and passive engagement during tea and lunch breaks as a place to meet other people and eat 	Requirements: <ul style="list-style-type: none"> ➤ IsiXhosa boys between the ages of 18 and 21 years (known as abakhwetha) undergo an initiation process into manhood ➤ They need an area of privacy and seclusion from their families and communities for about six weeks between December and January

Sources: CSIR (2000: 2-6); City of Cape Town City Planner's Department (1997: 35-39); Let the children play (1997).

2.5.3 Park non-use

Constraints are also interpreted as reasons why people do not use parks or factors affecting park usage. The literature on developed countries conceptualises constraints in three ways: intrapersonal, interpersonal and structural constraints. Leisure preferences of people can be affected by their internal constraints. Intrapersonal constraints are psychological conditions of people, such as their personal characteristics, beliefs, perceptions or attributes (Geoffrey et al. 2005). Examples are childhood socialisation, socio-economic status of people, lack of time and fear of crime. Interpersonal constraints arise from interactions with others (Hansen 2006) and include no one to go with to parks, crowded parks and conflict and discrimination between park users (Hansen 2006; Mowen, Payne & Scott 2005). Structural constraints are factors that interfere between an interest and the ability to do an activity (Henderson et al. 2001). Structural constraints incorporate

economic, accessibility and proximity constraints and the role of the state to maintain parks. In contrast with the literature on developed countries, that focuses on individuals' constraints and structural constraints to park usage, the literature on developing countries pay more attention to the structural constraints that could lead to individuals' constraints and influence how and why people use parks or not.

2.5.3.1 Intrapersonal constraints to park usage

Recreation socialisation is already formed in childhood. How individuals perceive parks is a reflection of how parents have socialised their children to participate in recreation activities (Finney & Rishbeth 2006; Geoffrey et al. 2005). According to Byrne & Wolch (2009) and Hansen (2006), *socio-economic status*, which includes age, gender, income levels, occupation, race and ethnicity, are important intrapersonal factors to determine park usage. Socio-economic status, together with *childhood socialisation*, determine people's perceptions and cultural preferences about park usage in their adult life (Dunnett, Swanwick & Woolley 2002; Finney & Rishbeth 2006; Tucker, Gilliland & Irwin 2007).

Another intrapersonal constraint to using parks is people working unsociable hours and not having enough *time* to visit parks (Dunnett, Swanwick & Woolley 2002; Geoffrey et al. 2005). Furthermore, people have different perceptions of the value and availability of time. In some cultures, people operate on polychronic time, where occurrences occur simultaneously and many people are involved, whereas other cultures have a monochronic time system where they concentrate on one thing at a time, because activities like work and leisure are compartmentalised. (Zhang & Gobster 1998). People's perceptions of time can influence the meanings people attach to recreation activities, which influence park visitation (Hansen 2006; Henderson et al. 2001).

The most frequently mentioned intrapersonal constraint to using parks is a *lack of safety and security* in parks *and a fear of crime* occurring in parks. Specifically women, children, the elderly and racial minority groups are afraid.⁹ Women have higher levels of fear related to victimisation and sexual attack that could occur in concealed areas (Burgess, Harrison & Limb 1988; Page, Nielsen & Goodenough 1994). Women also have more fears associated with teenage delinquency, glue sniffing, drug use, alcohol abuse, gangs, strangers loitering, mugging and crime, problems with

⁹ (Azuma et al. 2006; Geoffrey et al. 2005; Hansen 2006; Ho et al. 2005; Henderson et al. 2001; Mitchell 1995; More 1990; Mowen, Payne & Scott 2005; Ravenscroft & Markwell 2002; Tierney, Dahl & Chavez 2001; Zhang & Gobster 1998).

homeless people and strangers approaching children (Hansen 2006; Madge 1997). In Burgess, Harrison & Limb's (1988) study, parents agreed that children have so much less freedom to roam compared to the time when they were growing up. They also regard the general social environment as being deprived of opportunities to play and feel that access to a private garden provides more security than allowing their children to play in parks alone. Similar fears are expressed in more recent studies of Azuma et al. (2006); Hansen (2006); Ho et al. (2005); Madge (1997). The elderly usually have a sense of powerlessness in society. This powerlessness may distort their perceptions of fear of crime and the likelihood of them being assaulted in parks (Alves et al. 2008; Dunnett, Swanwick & Woolley 2002; Madge 1997). In the literature on developed countries, racial minority groups of black and Asian youths also have personal safety concerns relating to racially motivated violence and prejudice that mostly occur in parks located in predominantly white areas (Dunnett, Swanwick & Woolley 2002; Finney & Rishbeth 2006; Madge 1997; Ravenscroft & Markwell 2000). Safety concerns in parks intimidate people and therefore people may avoid using the parks (Burgess, Harrison & Limb 1988; Hansen 2006; Page, Nielsen & Goodenough 1994).

2.5.3.2 Interpersonal constraints to park usage

If parents do not see recreation activities as important, then they will not accompany their children to parks (Tucker, Gilliland & Irwin 2007). Adult visitors seldom go to parks alone, implying that *companionship* is important when visiting parks (Crosby & Rose 2008; Ho et al. 2005; Tierney, Dahl & Chavez 2001). Parks may also be too *crowded* (Geoffrey et al. 2005; Hansen 2006). The result of an unequal distribution and access to parks is that parks become sites where social interaction can no longer take place and sites of struggle and resistance, confrontation and *conflict* (Geoffrey et al. 2005; Hansen 2006; Hernandez-Bonilla 2008). The conflict manifests in "a struggle over who controls parks, who has access to parks, who determines parks' make-up and how parks are produced" (Hernandez-Bonilla 2008: 391).

Conflict is further noticeable in the form of *verbal conflict between users* or *conflict between multipurpose uses* of parks. *Verbal conflict* could be in the form of *discrimination* of marginalised groups (Byrne & Wolch 2009; Furuseth & Altman 1991; Henderson et al. 2001; Payne, Mowen & Orsega-Smith 2002). Henderson et al. (2001: 33) give an example of *discrimination* against black people in the United States of America, where one black woman in their study said: "[Black people] feel outnumbered and they are well aware that they are the minority, when all they see around them is white [people]." Discrimination in the form of ethnic differences also occurs (Byrne & Wolch 2009; Gobster 2002; Ho et al. 2005; Tinsley, Tinsley & Croskeys 2002). However, discrimination

may also occur inside ethnic groups. Intra-ethnic discrimination may have an influence on people's ability to assimilate with, or to be integrated into, the dominant culture of the discriminator (Geoffrey et al. 2005; Tierney, Dahl & Chavez 2001; Zhang & Gobster 1998).

The intra-ethnic group differences are supported by Tierney, Dahl & Chavez (2001), who conclude that as social integration between a minority and majority group [in an ethnic group] increases, the differences in recreation patterns decrease. Women's fears are mostly associated with sexual attacks, as described in the intrapersonal section (see Section 2.5.3.1). Fear of age discrimination manifests through the elderly 'feeling old' and seeing physical activity and parks as something that is mainly available to younger people (Furusetth & Altman 1991; Henderson et al. 2001). Many of the elderly in Payne, Mowen & Orsega-Smith's (2002) and Tinsley, Tinsley & Croskeys's (2002) studies also feel that there is conflict between their interests in activities in parks and the activities younger children prefer. The elderly in the aforementioned studies indicated that parks in their neighbourhoods mainly cater for children's interests by providing play equipment, but very few seats and walking trails are provided for them, who mostly prefer passive activities.

Lastly, *multipurpose user conflict* relates to usage of parks by homeless people, drug users and gangs, while other citizens also want to use the parks. When marginalised people feel unwelcome in parks, or discriminated against, they may be discouraged to use parks (Azuma et al. 2006; Geoffrey et al. 2005; Gobster 2002; Mitchell 1995). The impact of negative and/or hostile social interactions among residents can lead to disaffection with local government, damage people's willingness to participate in cooperation with governments and with other residents, disrupt and weaken familiarity and trust between residents and devalue individuals' worth or undermine personal goals (Kang 2006). Negative and/or hostile social interactions create harmful psychological and physiological outcomes, because it negatively affects one's mental wellbeing and overall health and immunity (Kang 2006).

2.5.3.3 Structural constraints to park usage

Structural constraints can be grouped into three broad categories: economic, accessibility and proximity, and the role of the state.

Economic constraints are associated with the marginality thesis (Zhang & Gobster 1998). Black people in developed and developing countries are marginalised to be poorer than white people and to have less access to park services and private gardens and transportation (Briffett et al. 2004;

Erkip 1997; Harnik & Simms 2004; Hernandez-Bonilla 2008; Pasaogullari & Doratli 2004). Their need for parks and open spaces is therefore normally more. Limited parks are provided in black neighbourhoods. One reason for this is past policies of discrimination (Harnik & Simms 2004; Ho et al. 2005; Sasidharan, Willits & Godbey 2005; Shafer, Lee & Turner 2000). The result is that black people often have to visit regional parks that are further away, which is associated with added transportation costs and usually entrance fees (Gobster 2002; Payne, Mowen & Orsega-Smith 2002; Zhang & Gobster 1998). During apartheid in South Africa, black people were poorer than white people and they were forced to live further away from services and recreation activities. Today, poor black South Africans can still not afford to buy their own cars in order to get transportation to go to parks/recreation activities. Public transport costs are also very expensive. Poorer black people may therefore visit parks less. The higher the income, the economic status and educational level, the greater the chance that people may be able to engage in their preferred recreation activities in parks (McDonald 1989; Western Cape Government 1994).

Further barriers for marginalised black people to use parks include that they feel powerless to influence service-delivery strategies, because they feel the government does not consider their perceptions in planning, they have a lack of confidence due to negative perceptions associated with previous park experiences where they were marginalised, there is a lack of appropriate interpretive information and park signage, and parks do not satisfy their desired needs for activities (Morris 2003). In contrast, wealthier white people can afford a house with a private garden (Crosby & Rose 2008; McInroy 2000). White people also have better access to parks and walk to parks more often (Gobster 2002; Samesi & Chiarello 2006; Shafer, Lee & Turner 2000). The result is that poorer black people usually use parks less often than richer white people (Gobster 2002; Ho et al. 2005; Payne, Mowen & Orsega-Smith 2002; Sasidharan, Willits & Godbey 2005). It should be noted that the marginality thesis can also be applied to other races or ethnicities and other marginalised groups in society. From the aforementioned one can see that intrapersonal, interpersonal and structural constraints work together to determine park usage in developed and developing countries.

Government policies may result in parks being distributed unequally across communities, which create size, quantity, *accessibility and proximity* problems. Increased growth changes parks into leftover spaces that are not big enough for citizens to use (Pasaogullari & Doratli 2004). The sizes of parks are influenced by the number of potential park users, park user density, activities in which people can participate in parks and the ecological and social carrying capacity of park areas (Gedikli & Ozbilen 2005). Park quantity refers to the total amount of parks and is determined by the location, residential and population density and proximity (City of Cape Town City Planner's

Department 1997; CSIR 2000; Spocter 2008; Walters 2005). Rapid growth also influences park accessibility and proximity negatively. Accessibility has two elements: a temporal element (the travel time and/or proximity between two points) and a spatial element (reflecting the distribution of the activities) (Pasaogullari & Doratli 2004). It is important when governments plan parks that both these aspects of accessibility are taken into consideration in order to ensure that all citizens have access to parks that are proximate enough for them to use it (Pasaogullari & Doratli 2004).

The *accessibility and proximity* of parks to people's homes and/or work are essential for determining whether parks will actually be used or not and the frequency of its use. Accessibility is defined as "a measure of spatial distribution of facilities, adjusted for the desire and ability of people to overcome distance or travel time to access facilities" (Giles-Corti et al. 2005: 171). An alternative description defines accessibility as "moving independently in space, both physically and mentally. Accessibility ties in closely with proximity, which in turn is associated with distances travelled to recreation destinations" (Seeland & Nicole 2006: 32).

The closer parks are located to the home or work, the better the chances that people will use them (Furuseth & Altman 1991; McCormack et al. 2006; Shafer, Lee & Turner 2000; Tucker, Gilliland & Irwin 2007). People want parks to be on their doorsteps – which mean that it should be accessible by a variety of transport modes (Giles-Corti et al. 2005; Iamtrakul 2005; Savasdisara 1988). Access by foot or at least bicycle becomes crucial for determining usage (Azuma et al. 2006; Henderson et al. 2001; Pincetl & Gearin 2005; Van Herzele & Wiedemann 2003). If parks are inaccessible and not proximate, people will not use it (City of Cape Town City Planner's Department 1997; CSIR 2000; Spocter 2008; Walters 2005). Harnik & Simms (2004: s.p.) state the following:

"People will use parks if they are within walking distance. Accessible and proximate parks allow community interaction where people can connect with others. If parks are too far away, most people will skip the trip or they will drive. Once people start driving, the whole trip loses the 'community' benefit that would have been received. At that point, it no longer matters how far away the park is. The park has become a formal destination, not a place to drop in. As a result, those people who travel further to get to parks are less likely to know other park visitors. Younger children and teenagers will no longer be able to get to parks on their own, at which point the whole purpose of a community park is lost."

The location and allocation of parks become important factors in ensuring that parks are distributed

equally and accessible across communities and that parks connect to each other to form an integrated open-space system that everyone can use (Payne, Mowen & Orsega-Smith 2002). Distances adults are willing to travel to parks for recreation depend on their demographic characteristics, the type of park destination, the physical activities they plan to undertake at the park destination and the number of park opportunities for recreation (Seeland & Nicole 2006). Potential park users are determined by individual factors (demographic factors), environmental factors and psychological factors, which all work together to determine what individuals will do with their spare time and where they will spend it (Gedikli & Ozbilen 2005; McCormack et al. 2006). Distances (and consequently proximity) are not always so important, since less proximate destinations may be more convenient and of better quality and have a greater variety of recreation facilities (Gedikli & Ozbilen 2005; McCormack et al. 2006; Seeland & Nicole 2006). The question is not “*whether* distance has a diminishing effect on behaviour, but rather what the actual *nature of the effect* would be” (Kaczynski et al. 2009: 184).

Three studies found that distances to parks did not have an effect on the amount of physical activity people engage in (Hillsdon et al. 2006; Kaczynski et al. 2009; Lindsey, Maraj & Kuan 2001). Kaczynski et al. (2009: 185) give two possible reasons for their results:

“[Firstly,] the use of parks might be subject to a threshold effect of distance, where use is not constrained until the park falls beyond a certain distance. In contrast, people with a higher attachment to park settings might be more willing to travel greater distances, even outside their neighbourhoods, to participate in their preferred activities. [Secondly,] the distances people are willing to travel can be a consequence of information held by people about the opportunities available to them. People might have limited knowledge about their neighbourhood parks and consequently use parks that are further away.”

When looking at proximity and accessibility, geographers consider physical and spatial choices, because people’s choices of parks may be guided by distance, but also by awareness and/or cultural and social preferences.

Governments find it increasingly difficult to provide parks in the wake of development pressure. Governments create an illusion of cooperation and community empowerment, because top-down structures by-passes local people (McInroy 2000). However, governments may use community participation to conceal an agenda of power over the urban landscape and to promote cities for

capital investment to impress elites. As a result, governments often endorse that parks have to satisfy the needs of the communities, but in reality, the opposite occurs (McInroy 2000).

Local authorities neglect people's desires for parks and do not allow adequate community participation in park design and management. Political agendas and a desire to save money influence local authorities' decisions. Governments follow quick-fix interventions through which their wills are imposed on society. The result is a controlled system that neglects ordinary powerless citizens' perceptions of park provision (Hernandez-Bonilla 2008; McDonald 1998; McDonald & Smith 2002; Wenzel 2007). The provision, management, design and maintenance of parks are part of a bigger top-down political-economic agenda according to which governments treat parks as commodities in exchange for political power (Hernandez-Bonilla 2008). The result is that park design is standardised and consequently does not concur with the particular cultures and preferences of people (Geoffrey et al. 2005).

In the studies of Burgess, Harrison & Limb (1988); Giles-Corti et al. (2005); Hansen (2006); Rishbeth (2001), parks are considered monotonous, sterile and boring and do not invite creative play and social settings that could act as gathering places for friends or family. Facility concerns may be ascribed to a lack of funding. The result is that the level of improvement and maintenance of parks have to be lowered, making it difficult for governments to guarantee maintenance, comfort and safety, which parks should provide (Cranz & Boland 2004; International Federation of Parks and Recreation Administration 2006). As a result, some parks do not satisfy people's needs or fit in with their perceptions of and preferences for parks. The result is that people are discouraged to use parks and when they do use it, they complain that the state does not maintain it properly (Jansen van Vuuren 2005; Spocter 2008; Wall 1992; Wilson 1989; Wilson & De Wet 1992).

Maintenance complaints include problems with dirty areas filled with litter, insects and pests, lack of variety in facilities, lack of lighting in parks and safety and security risks (Jim & Chen 2006; Pasaogullari & Doratli 2004; Yilmaz, Zengin & Yildiz 2007). Ultimately, people have added safety and security concerns, which result in people using parks less (Azuma et al. 2006; Hansen 2006; Madge 1997). Two South African researchers say parks in this country are mostly empty and are not commercial pieces of open land. They feel that community halls or swimming pools should replace it. However, the same researchers state that the only reason for keeping parks is so that children have an area in which to play (Jansen van Vuuren 2005; Lourens 1989b). The International Federation of Parks and Recreation Administration (2006) state that governments need to have effective park-budget plans. The budgets of parks can be supplemented by entrance fees, increasing

tax revenue, donations and investments from the private sector, cutting costs associated with upholding facilities that have outlived their use, and volunteers who work in parks to cut back on maintenance costs.

2.5.4 Park space

The aforementioned strategies mean nothing if governments cannot find innovative methods to increase the number of visitors to parks. Increasing the number of visitors to parks requires an adequate park-management philosophy (Byrne & Wolch 2009). A bottom-up approach to the delivery of services, especially parks, is a park-management philosophy that is increasingly acknowledged in the literature as an essential strategy to increase park visitor numbers. A benefits-based management strategy to manage parks effectively was outlined by Hansen (2006) (Figure 2.4). The strategy requires park planning to start at the end, by identifying and prioritising the community’s desired park outcomes first and then working backwards, by deciding on the park outputs, then the actions and finally the inputs governments would need to implement to achieve the outcomes.

INPUTS: Resources used to provide parks and facilities, for example labour, money, materials, the environment where the parks will be located and constraints, such as laws and regulations.	+	ACTIONS: What park personnel (or the government) do with the inputs, for example using materials and labour to construct a playground.	=	OUTPUTS: What is produced because of the actions of park personnel (or the government). This is usually measurable, for example the number of playgrounds constructed, the number of plants planted and the amount of weeding completed.
OUTCOMES: The beneficial or negative impacts that result from the production and use of the outputs, for example improved social skills from social interaction at a picnic area, skills development from using a skate park and erosion caused by riding bicycles.				

Adapted from: Hansen (2006: 12).

Figure 2.4 A benefits-based management strategy for governments to manage parks effectively

The aforementioned strategy is consistent with the literature, indicating that park staff and governments should not just assume they know what is needed in parks, but that citizens’ perceptions also need to be considered when planning to better meet their park needs and aspirations (Cranz & Boland 2004; Hansen 2006; Hardy 1980; Zhang & Gobster 1998). By understanding citizens’ diversity, delivery of parks can continuously be flexible and adapted to benefit a variety of different cultures and citizens in changing communities (Henderson et al. 2001; Payne, Mowen & Orsega-Smith 2005; Pincetl & Gearin 2005). A bottom-up approach may ensure that people use parks more often since communities would have a direct input in its planning,

design and delivery (Shafer, Lee & Turner 2000). It would also ensure that parks are created at the correct locations so that the maximum number of community members would be able to access it in the shortest possible time. Facilities would also be provided in parks that will suit the communities' preferences (Henderson et al. 2001; Mowen, Payne & Scott 2005; Tucker, Gilliland & Irwin 2007). While community input is important, the needs of community members will change. All levels and spheres of government have to be involved in park design, management and maintenance (Hernandez-Bonilla 2008; Pasaogullari & Doratli 2004; Yilmaz, Zengin & Yildiz 2007), and governments and park planners need to have innovative new ideas to satisfy these changing community needs (Hansen 2006; Pincetl & Gearin 2005).

Another approach that governments and park planners can follow, in conjunction with a bottom-up approach, is the application of GIS to act as a support tool for planning decisions on public facilities (Hague 2001; Ribeiro & Antunes 2002). GIS is useful in determining effective accessibility, proximity, location, size and threshold standards for parks in order to ensure equitable park delivery to all citizens (Comber, Brunson & Green 2008; Nicholls 2001). Community participation and flexibility in the park standards is therefore crucial to increase park usage (Wilkinson 1985).

2.6 CONCLUSION

In this chapter, people's park usage was discussed in terms of different elements that affect it. As mentioned, it was expected that differences would occur between countries. However, very minor differences in park usage were only detected in terms of who uses parks in the different geographic locations. The findings show that community/neighbourhood parks have a vital role to play in the broader open-space system and urban built environments through providing green landscapes with or without facilities (Swanwick, Dunnett & Woolley 2003). Park users share the same benefits they experience in or with parks. Although park non-users do not actually use parks, they also experience indirect benefits from it, which are similar to that of park users (Azuma et al. 2006; Wolf 2005). Parks enhance people's overall quality of life by providing a careful balance between economic, environmental, transportation, aesthetic and amenity, sense of place, restorative, spiritual and other benefits.

The following key observations pertain to park use in general. Park users are mostly children between one and 13 years, who are accompanied to parks mostly by their female parents/caretakers (Burgess, Harrison & Limb 1988; Hansen 2006; Tucker, Gilliland & Irwin 2007). Interestingly, women are more likely to visit parks more frequently if parks provide better and safer opportunities

of movement (Furuseth & Altman 1991). Affluent and well-educated white men between the ages of 25 and 44 years also frequently use parks, mostly for exercise (Dunnett, Swanwick & Woolley 2002; Madge 1997). Park users walk to parks that are between 5-15 minutes away (Alves et al. 2008; Hansen 2006; McCormack et al. 2006). Park users use parks for both active and passive recreation activities during different life stages (Burgess, Harrison & Limb 1988; Ho et al. 2005; Iamtrakul 2005). Park non-use is explained by intrapersonal, interpersonal and structural constraints to park usage. Intrapersonal constraints include childhood socialisation, socio-economic status, lack of time and fear of crime (Geoffrey et al. 2005). Interpersonal constraints include going to parks alone, crowded parks, racial and ethnic discrimination and conflict between different park users (Hansen 2006; Mowen, Payne & Scott 2005). Structural constraints include economic, accessibility and proximity constraints and the role the state plays in park management and maintenance (Henderson et al. 2001). Finally, a bottom-up approach to park planning, management and maintenance is needed to create ideal park spaces (Hansen 2006).

The same type of park users, who belong to a particular class, uses parks in the same way across the world. Differences that occurred in terms of park usage were found in the literature itself. International literature explains explicitly who uses parks and who does not use it. However, South African literature focuses more on how parks may be seen in the broader service-delivery context than on actual characteristics of park users/non-users. There is a gap in the South African literature regarding the perceptions, preferences and needs of ordinary citizens when it comes to park usage, which was noted as early as 1989 (Lourens 1989a; Wilson 1992; Wilson & De Wet 1992).

South Africa and specifically Cape Town can learn from the international context to remedy local circumstances when planning park development, delivery and management. Despite the aforementioned, research on local park usage is still required to ensure that parks are planned, delivered, managed and maintained according to our unique local urban planning conditions and circumstances. For that reason, this study first determined the spatial geography of parks in the City of Cape Town. The spatial location of parks were analysed according to the availability of parks per socio-economic area and the availability of parks per distance. Furthermore, my research determined how park usage differs between ordinary citizens in the City of Cape Town who belong to three different income classes. The class distinctions between the residents in the three income groups also influence their perceptions, preferences and needs with regard to parks. The research will guide the City Parks Department to manage the City of Cape Town's parks more effectively.

CHAPTER 3: SPATIAL GEOGRAPHY OF PARKS IN THE CITY OF CAPE TOWN

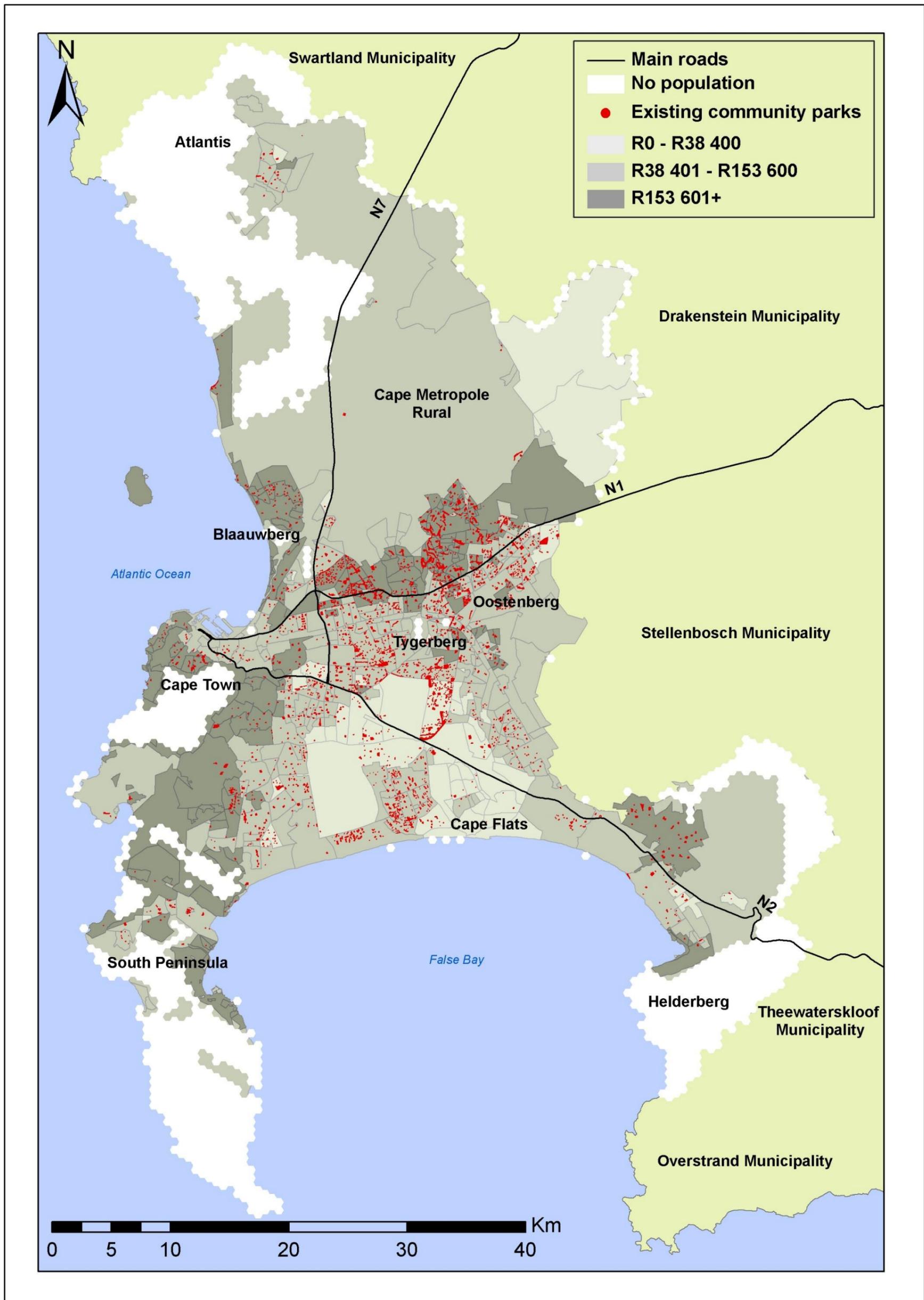
In order to perform a class-differentiated analysis on park use, it was firstly important to determine the spatial geography of parks in the City of Cape Town. The current provision/availability of parks in the City of Cape Town is specified through two GIS analyses in Chapter 3. Subsequent chapters give an analysis of the respondents' park usage and their satisfaction with parks.

3.1 INTRODUCTION

As suggested in international literature, the number of opportunities for park recreation (Seeland & Nicole 2006) and the distances to parks (Burgess, Harrison & Limb 1988; Hansen 2006; Kaczynski et al. 2009) are important variables to analyse, because it could help determine if people use parks or not, and the frequency of park usage. The spatial geography of parks was analysed by determining the park availability per socio-economic area and the park availability per distance. The data-processing and data-analysis processes that were followed to create the GIS maps were explained in Section 1.6.1 (Chapter 1). The GIS maps include: (1) the current park provision/availability; (2) an analysis of the proximity to a park with its capacity constrained; and (3) the proximity to a park only.

3.2 PARK AVAILABILITY PER SOCIO-ECONOMIC AREA

The park availability per socio-economic area analyses consisted of the following: the spatial location of parks, the number of parks, the population size of the three income categories in Cape Town, the ratio of the number of parks versus the population in each income category in Cape Town, the sizes of parks in area square metres and the park area in square metres per person. Figure 3.1 demonstrates the spatial distribution of the current provision/availability of parks in the residential areas of the three income groups in the City of Cape Town. The total number of parks (1200) appears to be almost equally spread between most suburbs throughout the City of Cape Town. However, upon closer investigation, Table 3.1 shows that most residents in Cape Town (1 700 060) belong to the middle-income group. Most of the parks (718) are also located in the areas of this income group. Not only do just over 450 000 high-income residents have a good provision of parks (317), but there are also more nature reserves and/or conservation/biodiversity areas located in their suburbs.



Data sourced from: City of Cape Town (2009b); Statistics South Africa (2001).

Figure 3.1 The spatial distribution of the current provision/availability of parks in the three income groups in the City of Cape Town¹⁰

¹⁰ No population indicates areas where no population lives, or areas where very few people live. Examples of areas where no population lives are nature reserves and/or conservation/biodiversity areas, such as Helderberg Nature Reserve, the Cape Point area and Table Mountain National Park.

Although there is also a reasonable number of parks (165) located in low-income suburbs, low-income areas contain far fewer parks than high- and middle-income suburbs. The lack of park provision in low-income areas is even more profound when it is considered that these are suburbs with high housing and population densities and a large proportion of migrant squatters, where almost 1.2 million residents have to use only 165 parks (Table 3.1).

Table 3.1 The population's park provision in the three income groups in the City of Cape Town

Income category	Distance to a park	Number of parks	Population (2007)	Park versus population ratio	Area in square metres of parks	Park area in square metres per person
High-income	0-400 metres	143	169 057	1:1182	1 110 575	6.6
	401-800 metres	138	154 052	1:1116	1 622 751	10.5
	801-1200 metres	20	68 771	1:3439	351 984	5.1
	1201-9350 metres	16	61 477	1:3842	130 274	2.1
Total for high-income		317	453 357	1:1430	3 215 584 (31%)	7.1
Middle-income	0-400 metres	369	774 885	1:2100	1 919 104	2.5
	401-800 metres	271	516 219	1:1905	2 048 934	4.0
	801-1200 metres	50	188 946	1:3779	342 108	1.8
	1201-29 907 metres	28	220 010	1:7858	141 958	0.6
Total for middle-income		718	1 700 060	1:2368	4 452 104 (44%)	2.6
Low-income	0-400 metres	76	282 153	1:3713	960 481	3.4
	401-800 metres	64	302 408	1:4725	850 363	2.8
	801-1200 metres	14	218 855	1:15 633	67 060	0.3
	1201-17 629 metres	11	368 496	1:33 500	676 492	1.8
Total for low-income		165	1 171 912	1:7102	2 554 396 (25%)	2.2
Grand total for the entire City of Cape Town		1200	3 325 329	1:2771	10 222 084 (100%)	3.1

Furthermore, Table 3.1 indicates that the ratio of the number of parks versus the population is 1:2771 in the City of Cape Town. As income decreases, the park versus population ratio increases. Despite the fact that middle-income areas have the most parks, as mentioned, they also have the highest population. Consequently, 2368 people have to use one park in the middle-income suburbs, whereas the ratio of the number of parks versus the population is only 1:1430 in the high-income areas. In contrast, the ratio of the number of parks versus the low-income population is almost three times more than that of middle-income areas and almost five times that of high-income suburbs. Overall, 7102 people have to use one park in the low-income areas.

Similar to the results of the population size per income group, middle-income suburbs have the greatest park area in square metres (44%) (Table 3.1). High-income areas have 31% of the park area

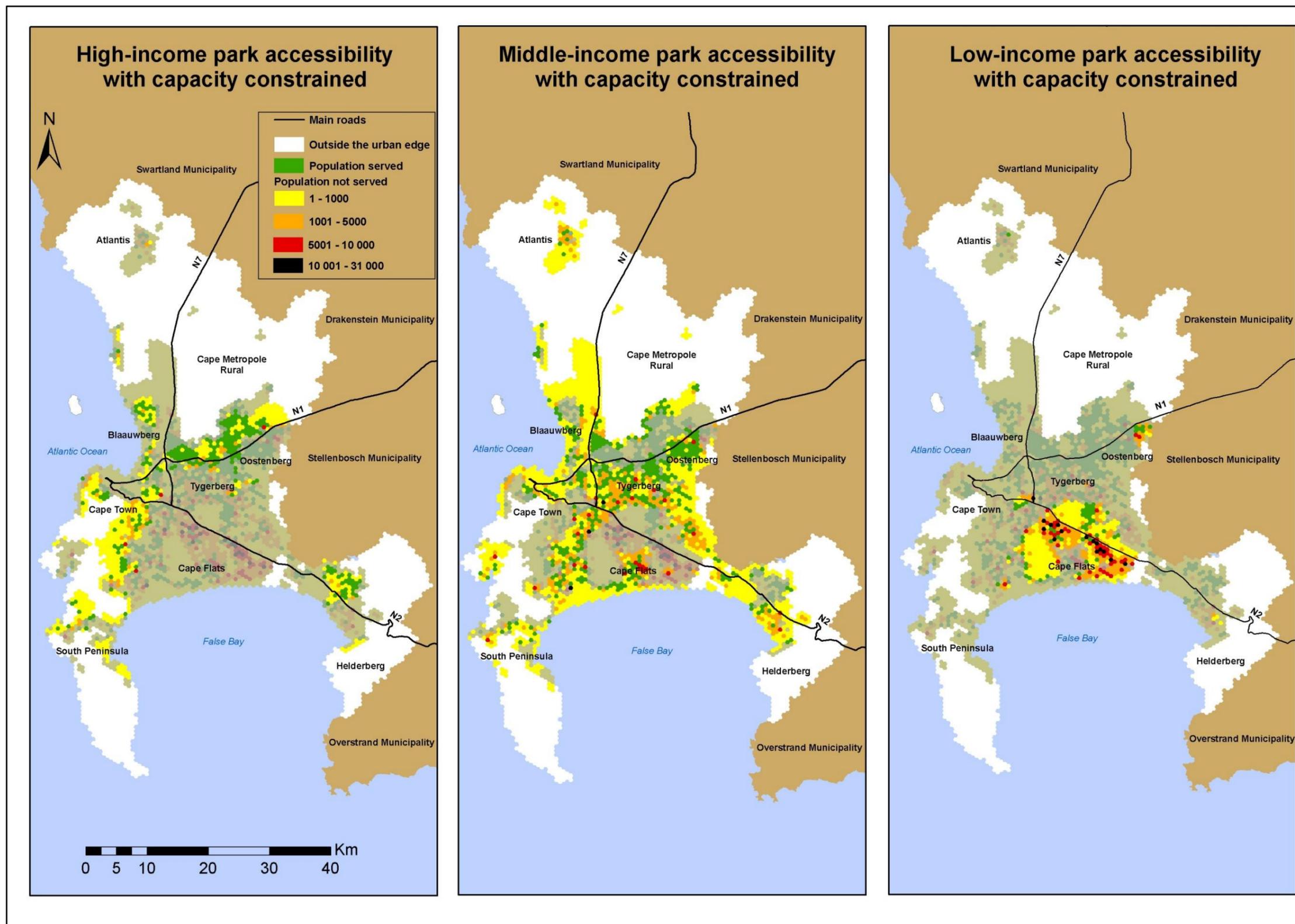
in square metres in the City of Cape Town. In contrast, low-income suburbs have the second highest number of residents, but the smallest park area in square metres (25%).

A study done by Barton, Grant & Cruise (2003) at the WHO Healthy Cities Research Centre at the University of the West of England on neighbourhood park space, playgrounds and informal play space, indicates that the park area in square metres per person in England's neighbourhoods should be between 6-8 square metres per person. Contrasting results are obtained when the park area in square metres per person is calculated for Cape Town (Table 3.1). Every low-income group resident only has 2.2 square metres of park area. A slightly larger park area (2.6 square metres) is available to middle-income group residents. On the other hand, high-income suburbs are less densely populated and have a relatively large total park area (3 215 584 square metres). Consequently, each high-income group person has 7.1 square metres of park area, which is approximately three times more than that of a middle- and low-income group resident. The park area per square metres per person in the high-income group is the only standard that compares very well with the park space standards in England, which highlights the backlog in park service delivery in the low- and middle-income groups in Cape Town.

3.3 PARK AVAILABILITY PER DISTANCE

Two calculations were done where the proximity to a park was taken into consideration: (1) proximity to a park with its capacity constrained and (2) proximity to a park only.

Figure 3.2 shows the proximity to a park with its capacity constrained. The analysis contains a calculation of the proximity to a park, with its capacity constrained, to which the City of Cape Town's 2001 income distribution layer was added. The CSIR's preliminary standard was used for the analysis (Green & Argue 2007). The standard states that a person should travel 750 metres to a park where a park's capacity is 0.5 hectares per 1000 people. Figure 3.2 indicates what part of the *population* is able to travel how *far* (in this case 750 metres) to a park facility with a certain *capacity* (in this case 0.5 hectares per 1000 people) (Mans 2009a). Figure 3.2 shows that the proximity to a park in high-income suburbs is relatively good. However, a large proportion of the population of high-income suburbs are not within 750 metres of a park with a capacity of 0.5 hectares. The trend is visible in large parts of high-income suburbs that have a population of between 1-1000 people who are not served by park space. In some parts of high-income suburbs, between 1001-5000 people are not proximate to a park with the specific requirements. Only four high-income areas are visible that do not serve 5001-10 000 people with a park.



Adapted from: CSIR (2009); Statistics South Africa (2001).

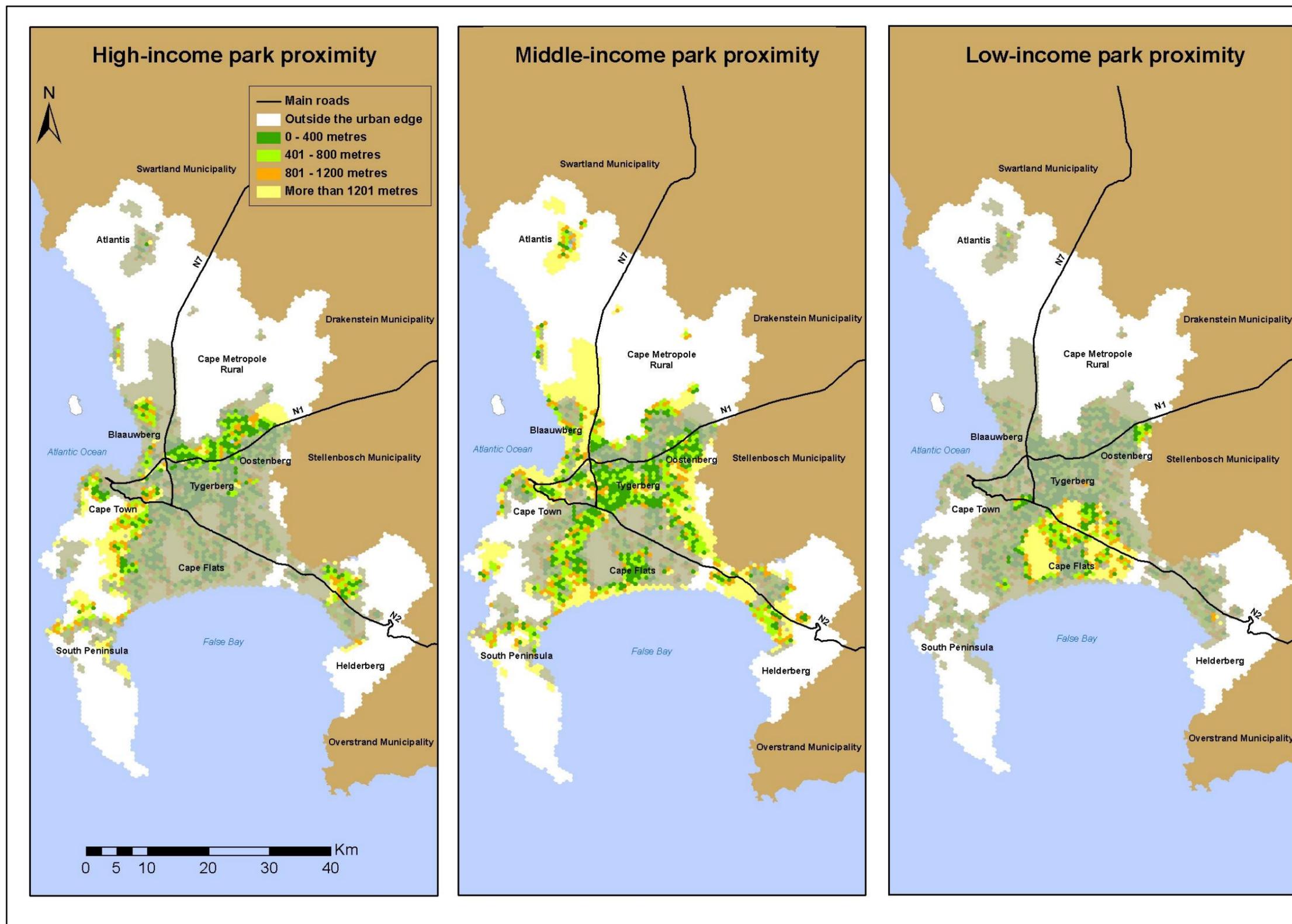
Figure 3.2 Park proximity with its capacity constrained in the three income groups in the City of Cape Town¹¹

¹¹ The shaded areas on Figure 3.2 indicate income distribution in the City of Cape Town. On the high-income map, the shaded areas indicate middle- and low-income suburbs, thus making the high-income areas more prominent – and on the middle-income map, the middle-income suburbs are more noticeable, as the shaded areas indicate high- and low-income suburbs. Similarly, on the low-income map, the high- and middle-income suburbs are darker, with the low-income suburbs being lighter.

Middle-income suburbs have areas where the population is served with park space, which appear to be concentrated along the N1 route, and to a lesser extent along the N7 route. The remaining middle-income suburbs have scattered areas where very good park proximity occurs. Contrary to high-income suburbs, middle-income suburbs contain more areas where between 1001-5000 people are not served with park provision. Furthermore, middle-income suburbs comprise of areas where proximity to a park is a big problem, because 5001-10 000 people and 10 001-31 000 people cannot reach a park within 750 metres that has a capacity of 0.5 hectares (Figure 3.2). In contrast, low-income suburbs have only a few areas where proximity to a park is not a problem. The trend is evident from only a few green areas that serve some of the population in low-income suburbs (Figure 3.2). Low-income suburbs also contain many areas where 1-1000 people and 1001-5000 people are not served by park space. In contrast to high- and middle-income suburbs, there are many areas in low-income suburbs that contain a large population that do not have park services, which is seen from the large number of red and black areas spread throughout low-income suburbs.

Figure 3.3 indicates the proximity to a park only. The capacity of each park facility was not added to the analysis. Fifteen minutes' walk is considered as the maximum time-distance people are willing to walk to parks (CSIR 2000; Hansen 2006; Iamtrakul 2005; McCormack et al. 2006; Spocter 2008). The time-distance guideline (see Table 1.2) was used to convert the distance in minutes to the distance in metres and vice versa.

Tables 3.1 to 3.3 show what part of the *population* travels how *far* to a park. In general, proximity to a park is not so problematic for the entire City of Cape Town (Table 3.2). Two-thirds of the entire City of Cape Town's population is within 800 metres' reach (or 10 minutes' walk) of a park, whereas 80% of the City of Cape Town's population can visit a park that is 1200 metres (or 15 minutes' walk) away. Further than 15 minutes' walk away is considered less satisfactory and in the case of the City of Cape Town, only 20% of people have to do so (Table 3.2). The specific income time-distance categories in Table 3.2 show that most people in the City of Cape Town (37%) can reach a park that is 0-400 metres (0-5 minutes' walk) away, followed by 29% of people that can reach a park 401-800 metres (6-10 minutes' walk) away. The lowest percentage of people in the City of Cape Town that can get to a park is 801-1200 metres (11-15 minutes' walk) away. The aforementioned results are spatially illustrated in Figure 3.3. Most of the areas with a dark and light green colour indicate that most people only travel 400 metres or 800 metres respectively to get to a park.



Data sourced from: City of Cape Town (2009b); Statistics South Africa (2001).

Figure 3.3 Proximity to a park in the three income groups in the City of Cape Town¹²

¹² The shaded areas on Figure 3.3 indicate income distribution in the City of Cape Town. On the high-income map, the shaded areas indicate middle- and low-income suburbs, thus making the high-income areas more prominent – and on the middle-income map, the middle-income suburbs are more noticeable, as the shaded areas indicate high- and low-income suburbs. Similarly, on the low-income map, the high- and middle-income suburbs are darker, with the low-income suburbs being lighter.

Table 3.2 The total population in the City of Cape Town who can reach a park within varying distances

Distance to a park in metres	Distance to a park in minutes	The total population of the City of Cape Town who can reach a park
0-400 metres	0-5 minutes	37%
401-800 metres	6-10 minutes	29%
801-1200 metres	11-15 minutes	14%
More than 1201 metres	More than 15 minutes	20%

Clear differences in the proximity to a park occur between income groups (Tables 3.1 and 3.3 and Figure 3.3). Most people in high-income suburbs can reach a park within 0-400 metres, or 0-5 minutes' walk. Almost an equal percentage of residents in high-income suburbs can get to a park 401-800 metres away, or within 6-10 minutes' walk. Approximately the same low percentage of people in high-income suburbs can visit a park 801-1200 metres and more than 1201 metres away. Results of middle-income suburbs are very similar to that of the high-income suburbs. However, middle-income suburbs cover a larger overall area in square metres in the City of Cape Town. Consequently, more middle-income group people can reach a park that is 0-400 metres away. Nonetheless, slightly lower percentages of residents in middle-income suburbs can visit a park further than 401 metres, or six minutes' walk away, as is seen from the orange and yellow colours (Figure 3.3). As opposed to the results of high- and middle-income groups, most people in low-income suburbs travel more than 1201 metres, or longer than 15 minutes, to get to a park, which is apparent from the large yellow areas in the low-income map (Figure 3.3). Overall, 19% of people in low-income suburbs walk 801-1200 metres (11-15 minutes) to a park, compared to 15% and 11% of high- and middle-income group people respectively. Fewer people (24% and 26%) in the low-income suburbs have a park within 0-400 metres and 401-800 metres respectively, compared to high- and middle-income suburbs (Tables 3.1 and 3.3 and Figure 3.3).

Table 3.3 Percentage of each income group who can reach a park within varying distances

Distance to a park in metres	Distance to a park in minutes	The population who can reach a park in an income group		
		High-income	Middle-income	Low-income
0-400 metres	0-5 minutes	37%	46%	24%
401-800 metres	6-10 minutes	34%	30%	26%
801-1200 metres	11-15 minutes	15%	11%	19%
More than 1201 metres	More than 15 minutes	14%	13%	31%

3.4 CONCLUSION

To summarise, the higher the income of a suburb, the more its residents can reach a park within 750 metres with a capacity of 0.5 hectares (Figure 3.2). In contrast, the lower the income in a

suburb, the more problematic the proximity to a park – a condition that does not meet the draft requirements for the City of Cape Town (Green & Argue 2007). Despite the aforementioned, high-, middle- and low-income suburbs contain areas in which the draft requirement does not serve some of the population with park space (Figure 3.2). Overall, Figure 3.3 and Tables 3.1 to 3.3 indicate that the proximity to a park is relatively good in high- and middle-income suburbs. The results are evident from the dark and light green colours in the high- and middle-income maps (Figure 3.3). The results are also visible in Table 3.3, which indicates that 71% of the high- and 76% of the middle-income residents can reach a park within 0-10 minutes' walk. Proximity to a park is more of a problem in low-income suburbs, where large parts of the population (31%) have to walk more than 1201 metres to a park. Despite the aforementioned, Figure 3.3 demonstrates that some low-income areas have better park proximity, where 69% of people in low-income suburbs can reach a park within 15 minutes' walk, which is considered to be the maximum time people will take to get to a park.

When a comparison is done between Figures 3.2 and 3.3, it is evident that proximity to a park is not such a big issue when only the proximity to a park is taken into consideration and no constraint is placed on a park's capacity (Figure 3.3). However, when a constraint is placed on a park's capacity, the results of park proximity change for the worse (Figure 3.2). Class differences are evident in both the analyses of park availability per socio-economic area and park availability per distance, because the low-income group contains most of the population that is not served with park space, regardless of the GIS analyses applied. To conclude, Chapter 3 serves as a background for the subsequent chapters on park usage (Chapter 4) and satisfaction with parks (Chapter 5). The provision of parks and where parks are located spatially in relation to people's homes and workplaces could influence who uses parks or not, the frequency with which they visit parks and the patterns of their park use.

CHAPTER 4: PARK USAGE ANALYSIS

Chapter 4 specifies park usage in its various forms. As a preface, I provide the City Parks Department's definition of community/neighbourhood parks and the laws and regulations of park usage, as stipulated in a 2009 draft by-law of City Parks. The biographical profile of the respondents are outlined as a background to the respondents' park usage, after which urban national park use, in the form of proximity to a conservation/biodiversity area (the Table Mountain National Park) and a park, is discussed. The relationship between being within reasonable distance to conservation/biodiversity areas, parks and having a private garden are also analysed. The respondents' park usage was tested through questionnaire analysis by determining the frequency of park visitation, time spent in parks, distances travelled to parks, mode of transport used to get to parks, activities the respondents and other residents participate in and the main reasons for park non-use. Lastly, the respondents' outdoor recreation choices and the relative importance of parks in comparison to other outdoor recreation areas are observed.

4.1 INTRODUCTION

Greening "is seen as humanising the City [of Cape Town]. It encompasses the planning, development and maintenance of recreation areas and parks on local level, among other things" (City of Cape Town Engineer's Department 1982: s.p.). As mentioned in Chapter 1, the City of Cape Town (2005: 3) defines local parks, which include community/neighbourhood parks, as "developable land with recreation facilities, which serve the needs of the local community or neighbourhood and are usually accessed on foot. It includes informal recreation facilities of small scale for children such as tot-lots and playgrounds, seating areas, open grass lawns and gardens." The City of Cape Town drafted a new public parks by-law in 2009. In the by-law, public parks include community/neighbourhood parks. The by-law was drafted to regulate the admission of people, animals and vehicles to public parks and to determine the conduct that will not be permitted within public parks, such as dumping, littering, liquor use, cooking of food, conducting business, auctions or riots and pamphlet distribution. Furthermore, the by-law regulates people's use of the facilities for their enjoyment and safety within public parks (City of Cape Town 2009a). No thorough class-differentiated needs assessment was however conducted to determine residents' specific use patterns, perceptions and preferences of urban parks before the draft was completed. For urban parks to "remain relevant in modern society, they must continue to adapt to changing community needs. Therefore, it is important to understand how the community values parks now and in the future, because these values will determine whether people actually use parks or not"

(Hansen 2006: 8). The study provides the City Parks Department with a bottom-up class-differentiated perspective of park delivery by analysing the respondents' perceptions and preferences of parks in a high-, middle- and low-income categorisation of suburbs. The class-differentiated approach provides insight into the respondents' park usage and the levels of satisfaction with park management and maintenance.

4.2 DEMOGRAPHIC PROFILES OF THE RESPONDENTS

In the study, the demographic profiles of the respondents were analysed by looking at the number of years the respondents have stayed in their suburbs; household size; home language, which can also indicate the racial composition in the City of Cape Town (due to the racial legacy of apartheid still being visible in most of the suburbs in Cape Town); and the percentage of the respondents who have a private garden and a car. No significant literature was found on the number of years lived in a suburb. However, the current study found that the respondents in the entire City of Cape Town have stayed in their suburbs for an average of 14 years (Table 4.1). The middle-income group respondents have resided in their suburbs the longest, with an average of 18 years, while the high- and low-income group respondents have stayed in their suburbs for 13 years on average. In the study of Payne, Mowen & Orsega-Smith (2002), black people are normally considered poorer than white people and usually have multiple generations living together and as a result have bigger families. The average household size in the City of Cape Town is six members (Table 4.1). Furthermore, the average number of household members increases as income decreases, which compares to the findings in the aforementioned literature. The high-income group families average four household members, while the middle- and low-income group respondents have an average of six and seven people per household respectively.

Due to the sensitive nature of race in South Africa, it was not included in the questionnaire. Home language, and where suburbs are located, together with common knowledge of the City of Cape Town's racial patterns (Western 1981) can however be used to make generalised assumptions about race. Table 4.1 also shows the geolinguistic consequences of the racial geography of the apartheid city. Although 39% of the respondents in the City of Cape Town speak Afrikaans, almost one-third of the respondents speak English or an African language. Most of the high-income group respondents and the majority of the middle-income group respondents speak Afrikaans, while the majority of the low-income group respondents speak an African language (mostly IsiXhosa and IsiZulu).

Appendix E indicates the home languages spoken in the different suburbs in the three income groups. High-income suburbs appear to be located in more previously white Afrikaans-speaking areas. Coloureds also make up a part of high-income suburbs, while the low percentage of African languages (mostly IsiXhosa and IsiZulu) spoken in high-income suburbs could indicate a lower percentage of black people. Middle-income suburbs are located in areas where more coloureds use to live during the apartheid years. White and black people reside in these suburbs in lower percentages. The majority of low-income suburbs are located in areas where black people reside, with coloureds being the second largest race group in these areas, as indicated by 17% of the respondents who speak Afrikaans in the low-income group. From the work of Western (1981), white people made up only a very small percentage of the residence in low-income suburbs, which is likely still the case today, because only 17% and 6% of respondents speak Afrikaans and English in the low-income group, respectively.

Table 4.1 Respondents' demographic profile

Average number of years stayed in a suburb	High-income (n = 402)	Middle-income (n = 370)	Low-income (n = 461)	All income groups (n = 1233)
Average number of years stayed in a suburb	13	18	13	14
Average household size	High-income (n = 406)	Middle-income (n = 363)	Low-income (n = 444)	All income groups (n = 1213)
Average household size	4	6	7	6
Home language	High-income (n = 412)	Middle-income (n = 383)	Low-income (n = 472)	All income groups (n = 1267)
Afrikaans	49% (n = 203)	54% (n = 207)	17% (n = 79)	39% (n = 489)
English	46% (n = 188)	44% (n = 167)	6% (n = 26)	30% (n = 381)
African language	3% (n = 13)	1% (n = 5)	76% (n = 358)	30% (n = 376)
Other languages	2% (n = 8)	1% (n = 4)	2% (n = 9)	2% (n = 21)
Respondents who have a private garden	High-income (n = 412)	Middle-income (n = 377)	Low-income (n = 479)	All income groups (n = 1268)
Private garden	83% (n = 340)	45% (n = 171)	12% (n = 55)	45% (n = 566)
Respondents who own a car	High-income (n = 411)	Middle-income (n = 383)	Low-income (n = 478)	All income groups (n = 1272)
Car ownership	94% (n = 386)	65% (n = 247)	32% (n = 154)	62% (n = 787)

Notes: 1. Percentages of home languages do not total 100 due to rounding.

2. Percentages of private garden and car ownership do not total 100 due to only calculating respondents who have a private garden and own a car.

The percentage of respondents who have a private garden and own a car decreases as income decreases, corresponding to the results of Burgess, Harrison & Limb (1988); Omer & Or (2005); Tierney, Dahl & Chavez (2001). Overall, having a private garden appears to be more problematic in the City of Cape Town than owning a car (Table 4.1). Only 45% of the respondents have a garden, compared to almost two-thirds of the respondents who own a car. Interclass differences are very

profound, with 83% and 94% of the high-income group respondents who have a private garden and a car respectively, while a mere 12% of the respondents in the low-income group have a garden and only 32% own a car. It is expected that the middle- and low-income group respondents will compensate for the loss of private gardens by going to parks. Furthermore, the implication of the middle- and low-income group respondents who do not own a car is that they cannot visit parks that are further away. Consequently, it is expected that more middle- and low-income group respondents may make use of public transportation if they want to visit parks that are further away.

4.3 URBAN NATIONAL PARK USE

The respondents could comment on their use of conservation/biodiversity areas. Conservation/biodiversity areas are defined as “developable land set aside as proclaimed nature reserves, protected natural environments, core flora sites, other sites with primary biodiversity value and bird sanctuaries” (City of Cape Town 2005: 3). Hence, the main difference between conservation/biodiversity areas and parks is that conservation/biodiversity areas fulfil a role to protect the natural environment, whereas parks primarily have a recreation function where the local community participate in informal leisure activities. The Table Mountain National Park was used as an example of a conservation/biodiversity area.

In general, 74% of the high-income group respondents indicated that their homes are within reasonable driving distance to conservation/biodiversity areas, compared to only 38% and 39% of the middle- and low-income group respondents respectively. The high-income group respondents also visit conservation/biodiversity areas the most (children on average 16 and adults 18 days per annum). The middle-income group respondents (children and adults) visit conservation/biodiversity areas 11 days a year on average, while the low-income group children only manage to visit it 9 days and adults 11 days on average a year. Possible explanations why the middle- and low-income group respondents visit conservation/biodiversity areas less, are that it is too far away from their homes (refer to Figure 3.1 in Chapter 3) and that they do not own cars to drive there.

Table 4.2 shows an example of how often in a year the respondents visit the Table Mountain National Park. Results of Table 4.2 contradict the findings of research conducted by Donaldson (2009). He conducted research on tourists who were present in the Table Mountain National Park. His findings indicate that 56% of the tourists, who were in the Table Mountain National Park, visit the park once a month or more. However, the majority of the respondents across all income groups (69%) (Table 4.2) never visit the Table Mountain National Park. In contrast, only 7% of the

respondents in all income groups visit the Table Mountain National Park once a month or more. Interestingly, the respondents who indicated ‘daily visits’; mostly work in the Table Mountain National Park. Conversely, the majority of the respondents in the three income groups indicated that they never visit the Table Mountain National Park. Despite the aforementioned, almost one-third of the high-income group respondents are the most likely to visit the national park every two months, compared to only 18% and 21% of the middle- and low-income group respondents. The percentages of the respondents in the three income groups who visit the Table Mountain National Park once a month or more (Table 4.2) also contradict the findings of Donaldson (2009).

Table 4.2 Frequency of Table Mountain National Park use

How often is Table Mountain National Park visited	High-income (n = 373)	Middle-income (n = 356)	Low-income (n = 436)	All income groups (n = 1165)
Never	59% (n = 220)	78% (n = 276)	70% (n = 306)	69% (n = 802)
Every two months	31% (n = 117)	18% (n = 64)	21% (n = 91)	23% (n = 272)
Monthly	5% (n = 18)	4% (n = 13)	4% (n = 18)	4% (n = 49)
Weekly	4% (n = 15)	1% (n = 2)	3% (n = 11)	2% (n = 28)
Daily	1% (n = 3)	0.3% (n = 1)	2% (n = 10)	1% (n = 14)

Note: Percentages do not total 100 due to rounding.

The main reasons given for why all income groups do not visit the Table Mountain National Park (Table 4.3) are that it is too expensive, a lack of transportation, a lack of time and/or planning to go and the Table Mountain National Park being too far away.

Table 4.3 Reasons for not visiting the Table Mountain National Park

Reasons for not visiting the Table Mountain National Park	High-income (n = 268)	Middle-income (n = 263)	Low-income (n = 334)	All income groups (n = 865)
It is too expensive	16% (n = 43)	38% (n = 101)	55% (n = 183)	38% (n = 327)
Lack of transportation	4% (n = 11)	18% (n = 48)	17% (n = 57)	13% (n = 116)
Lack of time and/or planning to go	14% (n = 38)	17% (n = 44)	6% (n = 21)	12% (n = 103)
It is too far away	13% (n = 34)	12% (n = 31)	10% (n = 34)	11% (n = 99)
Not sufficiently interested	15% (n = 39)	9% (n = 23)	8% (n = 26)	10% (n = 88)
Visit once a year / every few years	22% (n = 60)	2% (n = 5)	1% (n = 4)	8% (n = 69)
Unsafe	14% (n = 38)	3% (n = 9)	2% (n = 7)	6% (n = 54)
No need to see it again	2% (n = 5)	1% (n = 2)	1% (n = 2)	1% (n = 9)

Note: Percentages do not total 100 due to rounding.

Class differences are evident in the reasons why the three income groups do not visit the Table Mountain National Park with the same frequency (Table 4.3). The middle- and low-income group respondents complained that it is too expensive to visit the Table Mountain National Park. High

expenses occur because the Table Mountain National Park is situated too far away and these two income groups lack transportation to get there. They can also not afford to go on a Table Mountain National Park bus service excursion, which is a day trip that drives passed the most scenic points in Cape Town and the Table Mountain National Park. Furthermore, the middle- and low-income groups indicated a lack of time and/or planning to visit the Table Mountain National Park. In contrast, the high-income group respondents only visit the national park once a year or every few years. In addition, they expressed disapproval with the high cost of visiting the Table Mountain National Park, they indicated they are not sufficiently interested in visiting the Table Mountain National Park, it is unsafe to visit it and they have a lack of time and/or planning to go. Not many high-income group respondents (4%) experience problems with a lack of transportation.

In the literature, findings indicate that there is a strong correlation between belonging to a low-income group and having a private garden. Proximity to conservation/biodiversity areas decreases with socio-economic status as well (Burgess, Harrison & Limb 1988; Omer & Or 2005; Zhang & Gobster 1998). Similar results are observed in the City of Cape Town, because 78% (n = 264), 44% (n = 73) and 62% (n = 31) of the high-, middle- and low-income group respondents respectively, who have a private garden at their homes, also have conservation/biodiversity areas located close to their homes. Table 4.4 shows income in relation to proximity to conservation/biodiversity areas and parks. The majority of the high- and middle-income group respondents (80% and 81% respectively) live within 0-10 minutes' walk from parks. In contrast, only 54% of the low-income group respondents can visit parks within 0-10 minutes' walk from their homes. Overall, 28% of the low-income group respondents who are proximate to conservation/biodiversity areas have to walk for longer than 15 minutes to parks, compared to a mere 13% and 9% of the middle- and high-income group respondents respectively.

Table 4.4 Proximity to conservation/biodiversity areas and parks

Distances to parks	Respondents who have conservation/ biodiversity areas close to their homes		
	High-income (n = 278)	Middle-income (n = 126)	Low-income (n=134)
0-5 minutes	58% (n = 161)	52% (n = 66)	35% (n = 47)
6-10 minutes	22% (n = 60)	29% (n = 37)	19% (n = 26)
11-5 minutes	12% (n = 33)	6% (n = 7)	17% (n = 23)
More than 15 minutes	9% (n = 24)	13% (n = 16)	28% (n = 38)

Note: Percentages do not total 100 due to rounding.

The respondents were given the opportunity to indicate whether they want new parks closer to their homes or not. Table 4.5 indicates that almost 40% of the respondents in the City of Cape Town indicated that they would like to have new parks closer to their homes. Similarly to the literature

(Gobster 2002; Ho et al. 2005; McInroy 2000; Omer & Or 2005), the lack of parks that are located within reasonable walking distances is more evident in the lower-income groups, because almost half of the respondents in the middle-income group and 44% of the low-income group respondents want new parks closer to their homes, compared to only 26% of the high-income group respondents.

Table 4.5 Respondents who want new parks closer to their homes

Income category	Respondents who want new parks closer to their homes
High-income (n = 322)	26% (n = 83)
Middle-income (n = 202)	49% (n = 98)
Low-income (n = 272)	44% (n = 119)
All income groups (n = 796)	38% (n = 300)

Note: Percentages do not total 100 due to only calculating respondents who want new parks closer to their homes.

Table 4.6 confirms the findings in Table 4.5 that the middle- and low-income group respondents mostly want the new parks of all three income groups. In addition, the middle- and low-income group respondents who visit existing parks the least (low-intensity park usage) have the least number of parks available, and consequently mostly want the new parks. Despite the high-income group respondents having the second most number of parks and the second largest park area in square metres available (refer to Section 3.2 in Chapter 3), they still mostly want the new parks when they visit existing parks four to seven days a week.

Table 4.6 Respondents who visit existing parks with varying frequency who mostly want the new parks closer to their homes

Income category	Frequency of park use						All income groups	
	Low-intensity use (never / infrequent use)		Middle-intensity use (1-3 days a week)		High-intensity use (4-7 days a week)			
High-income group respondents who mostly want the new parks closer to their homes	Children (n = 117)	Adults (n = 138)	Children (n = 160)	Adults (n = 145)	Children (n = 35)	Adults (n = 19)	Children (n = 312)	Adults (n = 302)
	27% (n = 32)	28% (n = 38)	24% (n = 39)	23% (n = 34)	31% (n = 11)	32% (n = 6)	26% (n = 82)	26% (n = 78)
Middle-income group respondents who mostly want the new parks closer to their homes	Children (n = 86)	Adults (n = 94)	Children (n = 58)	Adults (n = 55)	Children (n = 39)	Adults (n = 18)	Children (n = 183)	Adults (n = 167)
	52% (n = 45)	48% (n = 45)	43% (n = 25)	40% (n = 22)	39% (n = 15)	44% (n = 8)	46% (n = 85)	45% (n = 75)
Low-income group respondents who mostly want the new parks closer to their homes	Children (n = 72)	Adults (n = 97)	Children (n = 97)	Adults (n = 69)	Children (n = 49)	Adults (n = 19)	Children (n = 218)	Adults (n = 185)
	53% (n = 38)	44% (n = 43)	44% (n = 43)	44% (n = 30)	37% (n = 18)	58% (n = 11)	45% (n = 99)	45% (n = 84)

Note: Percentages do not total 100 due to only calculating the respondents who mostly want the new parks closer to their homes.

The previous sections provided valuable background information about the respondents' demographic profile, which may influence the respondents' park use patterns, while the urban national park use section presented a general open space usage outline of the three income groups. The following section describes the respondents' community/neighbourhood park usage in the three income groups.

4.4 PARK USE

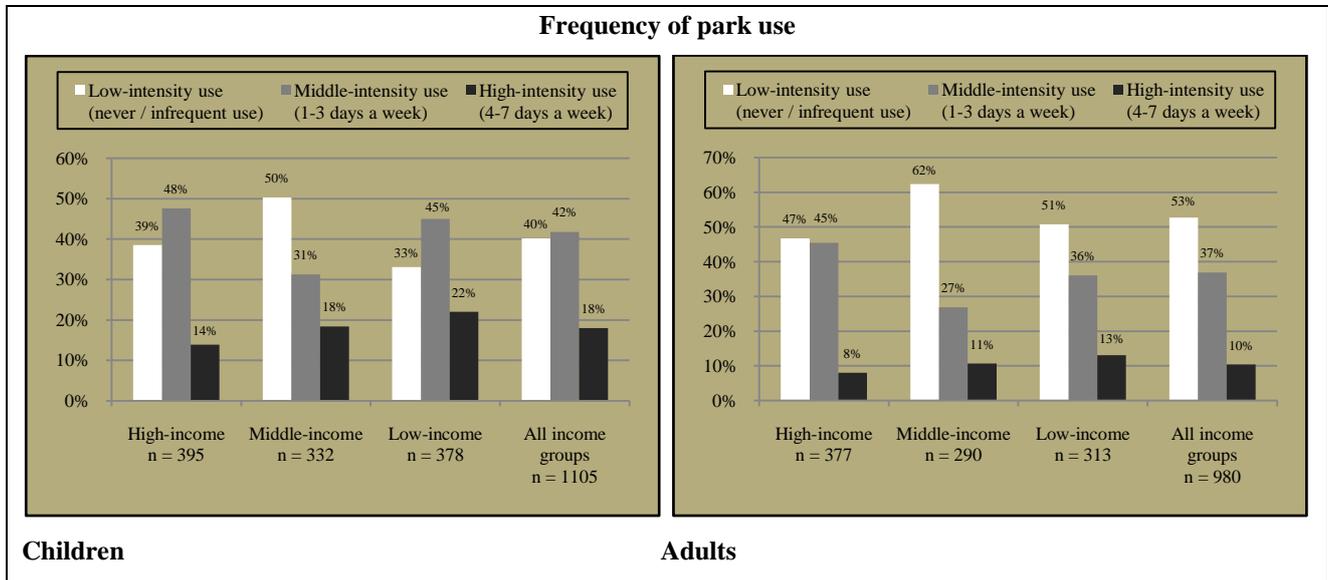
Differences in class were used to investigate park use (who uses parks, where, when, why and how).

4.4.1 Frequency of park use

The frequency of park usage was tested through respondents indicating how many days in a week the children and adults visit parks. Responses were recalculated into three levels of intensities. Low-intensity use includes the respondents who never visit parks, but also the respondents who visit it very infrequently throughout the year. Middle-intensity use takes into account the respondents who visit parks one to three days a week, while high-intensity park usage comprises the respondents who visit parks four to seven days a week. Results acquired for all the income groups indicate that children visit parks the most (Figure 4.1), which verify the findings in the studies of Burgess, Harrison & Limb (1988); Kaczynski et al. (2009); Seeland, Dübendorfer & Hansmann (2009). In contrast, just over half of the adults in all income groups never visit parks. This finding may suggest that the adults do not always accompany their children to parks. Interestingly, 42% of the children in all the income groups visit parks between one and three days a week, while 40% never or infrequently visits parks. A mere 18% of children and 10% of adults in all income groups visit parks four to seven days a week.

Class distinctions are evident in the frequency of park usage in the three income groups (Figure 4.1). Internationally, the more affluent visits parks more often, which may be explained by the fact that as the levels of social prosperity increase, the participation in park recreation facilities increases as well (Gedikli & Ozbilen 2004). Overall, 48% and 45% of the high-income group children and adults visit parks between one and three days a week. Despite the aforementioned, the low-income group children visit parks the most in a week. The significant percentage of the low-income group children, who visit parks one to three days and four to seven days a week, correlates with the findings of Nighat et al. (2005) and Pasaogullari & Doratli (2004). It is astonishing that half of the middle-income group children never visit parks or only visit parks irregularly during the

year. Similar to the children, the majority of the middle-income group adults never use parks, or only visit it infrequently throughout the year. The fact that half of the low-income group adults never or infrequently visit parks corresponds with the findings of Nembudani (1997).



Note: Percentages do not total 100 due to rounding.

Figure 4.1 Children and adults' frequency of park use

Distances to parks may also influence how regularly parks are visited or not. Results in Table 4.7 support the findings of Furuseth & Altman (1991); McCormack et al. (2006); Shafer, Lee & Turner (2000) that the closer parks are located to homes, the more often children and adults in all income groups use it. A distance decay function, as mentioned by Burgess, Harrison & Limb (1988); Hansen (2006); Kaczynski et al. (2009), is also evident in the City of Cape Town's results, whereby the appeal of parks dramatically declines for all income groups with increasing distances. The children and adults in all income groups regard more than 15 minutes' walk to parks as less satisfactory (Table 4.7). The result is visible in roughly double the percentage of the respondents who are more than 15 minutes' walk from parks who indicate they never visit parks or they make very limited use of parks, compared to the middle- and high-intensity park users. Despite the aforementioned, more low- and middle-income group children and adults walk longer than 15 minutes to reach parks than the high-income group respondents do. However, if the high-income group respondents stay in high-rise buildings without private gardens and there are no parks located within reasonable walking distances from their homes, they may compensate for the loss in private garden space and park space by visiting parks more often that are further away. The children and adults in all income groups also visit parks with almost the same frequencies in the different distance categories they walk to get to parks. A distance decay function is also observed between

the three income groups (Table 4.7). The high-income group children and adults also go to parks with the same frequency in the different distance categories, while slightly different results are seen for the middle- and low-income groups. It is interesting, and similar to the results of McCormack et al. (2006), that the high-income group respondents rather choose to relax and perform recreation activities in their own private gardens, which could explain why half and 54% of the high-income group children and adults respectively do not visit parks, despite it being only 0-5 minutes' walk away.

Table 4.7 Distances to parks influence the frequency of park usage

Income category	Distances to parks	Frequency of park use							
		Low-intensity use (never / infrequent use)		Middle-intensity use (1-3 days a week)		High-intensity use (4-7 days a week)		All income groups	
		Children (n = 136)	Adults (n = 160)	Children (n = 182)	Adults (n = 163)	Children (n = 46)	Adults (n = 24)	Children (n = 364)	Adults (n = 347)
High-income	0-5 minutes	50% (n = 68)	54% (n = 86)	62% (n = 113)	63% (n = 103)	70% (n = 32)	71% (n = 17)	59% (n = 213)	59% (n = 206)
	6-10 minutes	19% (n = 26)	19% (n = 31)	25% (n = 45)	25% (n = 40)	17% (n = 8)	17% (n = 4)	22% (n = 79)	22% (n = 75)
	11-15 minutes	13% (n = 17)	11% (n = 18)	9% (n = 17)	9% (n = 14)	9% (n = 4)	8% (n = 2)	10% (n = 38)	10% (n = 34)
	More than 15 minutes	18% (n = 25)	16% (n = 25)	4% (n = 7)	4% (n = 6)	4% (n = 2)	4% (n = 1)	9% (n = 34)	9% (n = 32)
Middle-income		Children (n = 147)	Adults (n = 164)	Children (n = 100)	Adults (n = 75)	Children (n = 55)	Adults (n = 27)	Children (n = 302)	Adults (n = 266)
	0-5 minutes	38% (n = 56)	45% (n = 73)	60% (n = 60)	59% (n = 44)	71% (n = 39)	59% (n = 16)	51% (n = 155)	50% (n = 133)
	6-10 minutes	29% (n = 43)	26% (n = 42)	22% (n = 22)	25% (n = 19)	18% (n = 10)	22% (n = 6)	25% (n = 75)	25% (n = 67)
	11-15 minutes	9% (n = 13)	8% (n = 13)	6% (n = 6)	5% (n = 4)	4% (n = 2)	7% (n = 2)	7% (n = 21)	7% (n = 19)
	More than 15 minutes	24% (n = 35)	22% (n = 36)	12% (n = 12)	11% (n = 8)	7% (n = 4)	11% (n = 3)	17% (n = 51)	18% (n = 47)
Low-income		Children (n = 84)	Adults (n = 122)	Children (n = 146)	Adults (n = 97)	Children (n = 75)	Adults (n = 32)	Children (n = 305)	Adults (n = 251)
	0-5 minutes	32% (n = 27)	46% (n = 56)	43% (n = 62)	34% (n = 33)	48% (n = 36)	41% (n = 13)	41% (n = 125)	41% (n = 102)
	6-10 minutes	18% (n = 15)	16% (n = 19)	17% (n = 25)	19% (n = 18)	16% (n = 12)	19% (n = 6)	17% (n = 52)	17% (n = 43)
	11-15 minutes	11% (n = 9)	11% (n = 13)	19% (n = 27)	22% (n = 21)	17% (n = 13)	22% (n = 7)	16% (n = 49)	16% (n = 41)
	More than 15 minutes	39% (n = 33)	28% (n = 34)	22% (n = 32)	26% (n = 25)	19% (n = 14)	19% (n = 6)	26% (n = 79)	26% (n = 65)

Note: Percentages do not total 100 due to rounding.

The influence of not having a private garden at home on the frequency with which the children and adults visit parks is shown in Table 4.8. Not having a private garden does not increase the frequency with which the high- and low-income group adults and the middle-income group children and adults go to parks, probably because they do not have the time to do so. The results correspond with the findings in Figure 4.1, which indicate that the adults visit parks less frequently than the children and that the middle-income group children and adults use parks the least. In contrast, 38% of the high-

income group children and almost half of the low-income group children, go to parks one to three days a week if they do not have a private garden.

Table 4.8 The frequency with which respondents who do not have a private garden visit parks

Frequency of park use	Respondents who do not have a private garden					
	High-income		Middle-income		Low-income	
	Children (n = 69)	Adults (n = 65)	Children (n = 172)	Adults (n = 145)	Children (n = 334)	Adults (n = 277)
Low-intensity use (never / infrequent use)	36% (n = 25)	45% (n = 29)	49% (n = 285)	62% (n = 90)	33% (n = 109)	51% (n = 141)
Middle-intensity use (1-3 days a week)	38% (n = 26)	45% (n = 29)	32% (n = 55)	27% (n = 39)	46% (n = 152)	36% (n = 100)
High-intensity use (4-7 days a week)	26% (n = 18)	11% (n = 7)	19% (n = 32)	11% (n = 16)	22% (n = 73)	13% (n = 36)

Note: Percentages do not total 100 due to rounding.

4.4.2 Time spent in parks

The respondents were asked to indicate the time children and adults spend in parks based on four options. Internationally, visitors to parks spend between 15 minutes and more than one hour there (Dunnett, Swanwick & Woolley 2002; Gedikli & Ozbilen 2004; Nighat et al. 2005). Similar to the international findings, most of the children and adults in all income groups in the current study visit parks for longer than 15 minutes (Figure 4.2). Overall, the children in all income groups stay in parks longer, while the adults in all income groups visit parks for shorter periods.

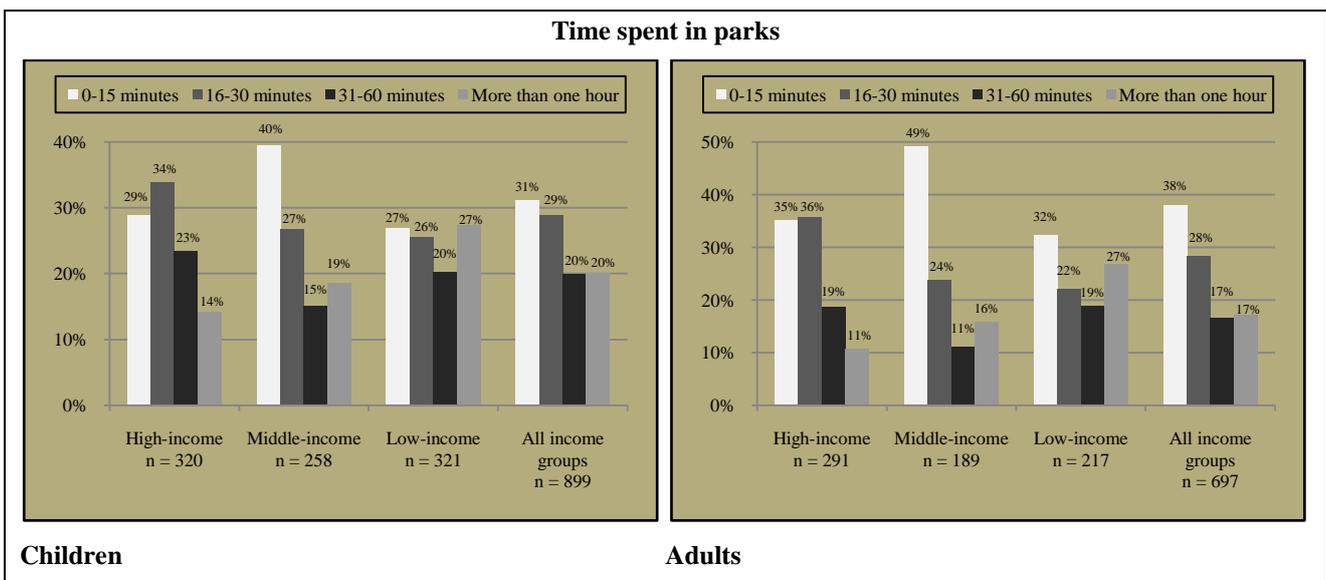


Figure 4.2 The time children and adults spend in parks

Although interclass differences occur between the time the respondents in the three income groups spend in parks, generally results in the three income groups also confirm the findings in the literature. Time spent in parks shows that the low-income group children visit parks the longest, while the middle-income group children visit parks for the shortest amount of time (Figure 4.2). In contrast, the high-income group adults visit parks slightly longer than the low-income group adults, while the middle-income group adults again visit parks for the shortest time. The high-income group adults may visit parks slightly longer than the other income groups' adults, because they accompany their children to parks more often than the other income groups (refer to Table 4.10).

4.4.3 Distances to parks

The respondents could specify how long it takes them to walk to their nearest park. Ideally, parks should be within 15 minutes' walk from the home. Less than 10 minutes' walk is considered the most preferred walking time to parks (CSIR 2000; Hansen 2006; McCormack et al. 2006; Spocter 2008). The more affluent have more parks within reasonable walking distances from their homes. In contrast, marginalised poorer black people have to travel further for outdoor recreation in park atmospheres. Similarly, a significant percentage of the respondents in all income groups take between 0-5 minutes to reach parks (Figure 4.3). Interclass differences show that the higher the income, the shorter the distances the respondents walk to parks. More high- and middle-income group respondents can visit parks within 0-5 minutes' walk, whereas almost 30% of the low-income group respondents take longer than 15 minutes to reach parks.

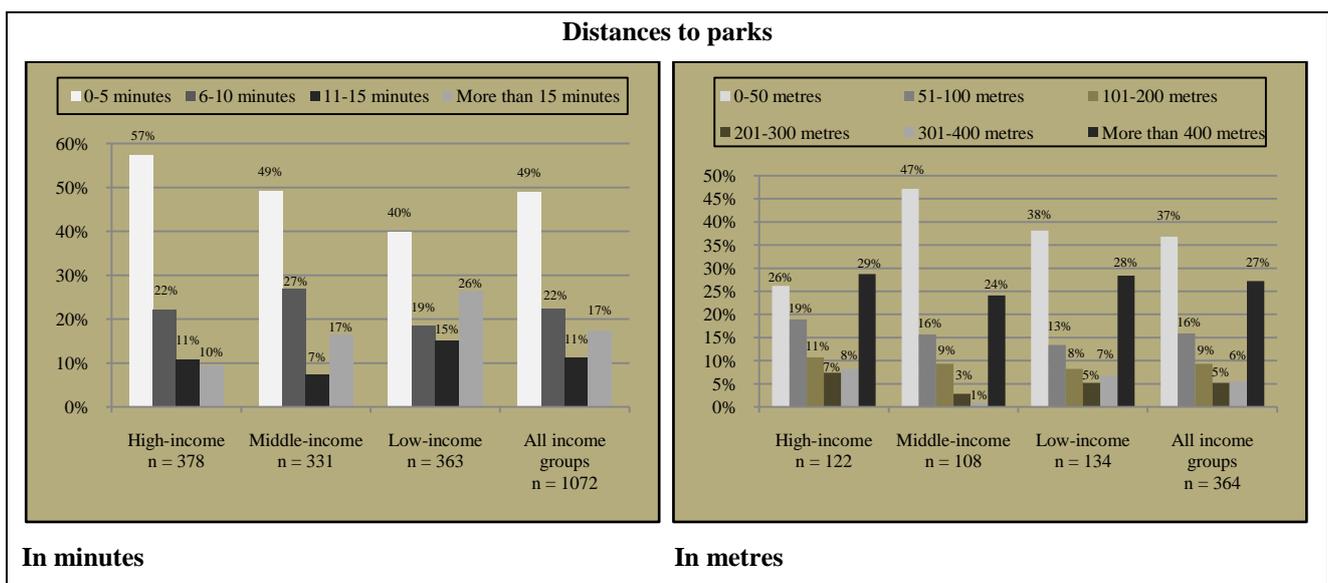


Figure 4.3 Distances to parks in minutes and metres

Figure 4.3 also indicates the distances to parks in metres. Although just over one-third of the respondents in all income groups can reach parks that are 0-50 metres away, distances to parks are problematic for almost 30% of the respondents in all income groups who walk further than 400 metres to the nearest park. Almost similar results are observed in the middle- and low-income groups. However, slightly more high-income group respondents walk over 400 metres to parks than 0-50 metres. Furthermore, the high-income group respondents appear to be closer to parks, because more high-income group respondents can reach parks 51-400 metres away compared to the middle- and low-income groups.

4.4.4 Mode of transport used to visit parks

Nine options were given for the respondents to choose the mode(s) of transport to reach parks (Table 4.9). The literature indicates that walking is the most preferred means of transportation to parks (Azuma et al. 2006; Hansen 2006; Harnik & Simms 2004). When parks are too far away and respondents have to drive to parks, the benefits of visiting parks are lost (Harnik & Simms 2004).

Table 4.9 Mode of transport children and adults use to get to parks

Mode of transport	High-income (n = 413)		Middle-income (n = 386)		Low-income (n = 489)		All income groups (n = 1288)	
	Children	Adults	Children	Adults	Children	Adults	Children	Adults
Walk	59% (n = 244)	54% (n = 221)	58% (n = 223)	48% (n = 185)	51% (n = 251)	36% (n = 176)	56% (n = 718)	45% (n = 582)
Run/Jog	9% (n = 38)	6% (n = 25)	3% (n = 11)	2% (n = 6)	4% (n = 19)	1% (n = 7)	5% (n = 68)	3% (n = 38)
Cycle	16% (n = 66)	7% (n = 29)	3% (n = 13)	1% (n = 3)	4% (n = 19)	1% (n = 3)	8% (n = 98)	3% (n = 35)
Drive with a car	20% (n = 82)	27% (n = 110)	9% (n = 35)	10% (n = 39)	4% (n = 21)	6% (n = 29)	11% (n = 138)	14% (n = 178)
Ride with a motorcycle	1% (n = 3)	0.4% (n = 2)	1% (n = 2)	1% (n = 3)	1% (n = 3)	1% (n = 6)	1% (n = 8)	1% (n = 11)
Taxi	0.2% (n = 1)	0.4% (n = 2)	3% (n = 11)	3% (n = 10)	7% (n = 36)	7% (n = 36)	4% (n = 48)	4% (n = 48)
Bus	0% (n = 0)	0.2% (n = 1)	1% (n = 3)	0.3% (n = 1)	2% (n = 11)	3% (n = 13)	1% (n = 14)	1% (n = 15)
Train	0% (n = 0)	0% (n = 0)	0.3% (n = 1)	0.3% (n = 1)	3% (n = 17)	4% (n = 18)	1% (n = 18)	1% (n = 19)
Other transportation	0.2% (n = 1)	0% (n = 0)	1% (n = 4)	1% (n = 3)	1% (n = 4)	0% (n = 0)	1% (n = 9)	0.2% (n = 3)

Note: Percentages do not total 100 due to multiple responses.

The majority of the children and adults in all income groups walk to parks (Table 4.9). Furthermore, results in Table 4.9 do not compare with the findings of Mowen, Payne & Scott (2005) and Omer & Or (2005) that only the more affluent use private transportation such as cars. In addition, results in Table 4.9 do not support the findings of Gobster (2002); Ho et al. (2005); Pincetl & Gearin (2005) that the lower-income group respondents rely more on public transport to reach parks. Driving by

car is the second most popular transportation option among the high- and middle-income group children and adults and is third in the low-income group (Table 4.9). Although taking a taxi is the second most preferred mode of transport to parks in the low-income group, the use of public transportation does not significantly increase with a decrease in income, most probably because it is expensive.

4.4.5 Participation in activities

The respondents were asked to choose from a list of activities that children and adults mostly partake in while visiting their parks. The respondents were also given an option to add activities that are not on the list and to comment on activities they see ‘other residents’ in their neighbourhoods participate in.¹³ Activities people partake in can be divided into two major categories: active and passive recreation (Burgess, Harrison & Limb 1988; Ho et al. 2005; Iamtrakul 2005). As people age, they engage in more passive activities (Payne, Mowen & Orsega-Smith 2002; Tinsley, Tinsley & Croskeys 2002). The survey showed that the children in all income groups participate in the more active recreation activities, while the adults engage in activities that are more passive (Table 4.10). Nonetheless, the children and adults in all income groups participate in both active and passive recreation activities. Almost a similar percentage of the ‘other residents’ in the City of Cape Town participate in passive and active recreation (Table 4.11), with passive recreation activities being only slightly more than the active recreation in the middle- and low-income groups. Overall, 40% of the children in all income groups play sports (Table 4.10), while 27% of the adults prefer walking as an active activity. Most children in all income groups accompany other children to parks, whereas resting/relaxing is the most popular passive recreation activity among the adults in all income groups.

Results in Table 4.10 confirm international findings that children play more in parks (CSIR 2000; Payne, Mowen & Orsega-Smith 2002; Tinsley, Tinsley & Croskeys 2002). Half of the high-income group children in the current study play on play equipment, while most of the middle- and low-income group children play sports. Accompanying other children to parks is also popular among the children in the three income groups. Black people have larger family and friend groups and social interaction in parks with the extended family and friends is more important to them (Byrne & Wolch 2009; Gobster 2002; Ho et al. 2005; Payne, Mowen & Orsega-Smith 2002). The

¹³ In other words, when the respondents visit parks, what do other residents use parks for? (What are the park activities they see other people in their neighbourhoods participate in?)

mentioned could explain why 39% of the low-income group children see accompanying other children to parks as the most important passive recreation activity (Table 4.10).

Table 4.10 Activities of children and adults in parks¹⁴

Activities in which respondents participate in parks	High-income (n = 413)		Middle-income (n = 386)		Low-income (n = 489)		All income groups (n = 1288)	
	Children	Adults	Children	Adults	Children	Adults	Children	Adults
Active activities								
Cycle	25% (n = 102)	14% (n = 56)	17% (n = 67)	7% (n = 25)	17% (n = 83)	6% (n = 31)	20% (n = 252)	9% (n = 112)
Exercise	31% (n = 127)	30% (n = 122)	21% (n = 81)	18% (n = 68)	21% (n = 14)	16% (n = 77)	24% (n = 312)	21% (n = 267)
Jog	23% (n = 96)	24% (n = 99)	20% (n = 78)	13% (n = 50)	22% (n = 109)	10% (n = 49)	22% (n = 283)	15% (n = 198)
Play frisbee/toys	30% (n = 122)	16% (n = 65)	31% (n = 119)	9% (n = 34)	28% (n = 135)	6% (n = 31)	29% (n = 376)	10% (n = 130)
Play games	21% (n = 87)	5% (n = 20)	29% (n = 112)	3% (n = 13)	35% (n = 171)	5% (n = 26)	29% (n = 370)	5% (n = 59)
Play on play equipment	50% (n = 205)	7% (n = 28)	40% (n = 153)	6% (n = 23)	23% (n = 110)	11% (n = 54)	36% (n = 468)	8% (n = 105)
Play sports	35% (n = 144)	18% (n = 74)	45% (n = 172)	18% (n = 69)	41% (n = 201)	12% (n = 59)	40% (n = 517)	16% (n = 202)
Rollerblade/skateboard	16% (n = 67)	3% (n = 11)	14% (n = 55)	2% (n = 9)	22% (n = 105)	4% (n = 17)	18% (n = 227)	3% (n = 37)
Walk	33% (n = 135)	38% (n = 156)	25% (n = 97)	27% (n = 104)	20% (n = 100)	18% (n = 90)	26% (n = 332)	27% (n = 350)
Walk the dog	30% (n = 122)	39% (n = 159)	17% (n = 65)	20% (n = 76)	9% (n = 45)	12% (n = 57)	18% (n = 232)	23% (n = 292)
Other activities	1% (n = 3)	2% (n = 7)	2% (n = 8)	3% (n = 13)	5% (n = 22)	5% (n = 22)	3% (n = 33)	3% (n = 42)
Passive activities								
Accompany other children	33% (n = 135)	51% (n = 211)	32% (n = 122)	31% (n = 121)	39% (n = 189)	18% (n = 88)	35% (n = 446)	33% (n = 420)
Barbeque	5% (n = 19)	9% (n = 38)	8% (n = 31)	18% (n = 68)	10% (n = 49)	19% (n = 91)	8% (n = 99)	15% (n = 197)
Date	7% (n = 27)	10% (n = 42)	6% (n = 23)	10% (n = 37)	7% (n = 32)	16% (n = 80)	6% (n = 82)	12% (n = 159)
'Escape the city'	33% (n = 136)	40% (n = 166)	16% (n = 61)	24% (n = 93)	9% (n = 45)	12% (n = 60)	19% (n = 242)	25% (n = 319)
Have a picnic	25% (n = 102)	24% (n = 99)	17% (n = 66)	20% (n = 78)	13% (n = 62)	19% (n = 92)	18% (n = 230)	21% (n = 269)
Observe wildlife/nature	21% (n = 85)	25% (n = 105)	12% (n = 45)	14% (n = 53)	7% (n = 32)	8% (n = 38)	13% (n = 162)	15% (n = 196)
Rest/relax	32% (n = 133)	47% (n = 194)	24% (n = 91)	36% (n = 140)	17% (n = 82)	30% (n = 146)	24% (n = 306)	37% (n = 480)
Socialise	29% (n = 118)	27% (n = 112)	18% (n = 69)	21% (n = 81)	16% (n = 76)	22% (n = 108)	20% (n = 263)	23% (n = 301)
View landscape/nature	20% (n = 84)	29% (n = 119)	12% (n = 46)	16% (n = 62)	12% (n = 56)	18% (n = 89)	14% (n = 186)	21% (n = 270)
Watch people	9% (n = 35)	13% (n = 55)	11% (n = 44)	14% (n = 53)	14% (n = 66)	16% (n = 80)	11% (n = 145)	15% (n = 188)
Work	5% (n = 20)	5% (n = 22)	8% (n = 31)	9% (n = 35)	14% (n = 68)	15% (n = 74)	9% (n = 119)	10% (n = 131)

Note: Percentages do not total 100 due to multiple responses.

¹⁴ Children and adults in Table 4.10 refer to the children and adults in the respondents' households.

Playing games, or with toys, walking and ‘escaping the city’ are other main activities that the children in all income groups participate in. The low-income group children may play with games and/or toys, because limited play equipment is provided in parks in low-income suburbs. Activities ranking the lowest among the children are more or less similar across all of the income groups. Working (for example doing homework), having a barbeque and dating are some activities that the children do not regularly partake in. In addition, the high-income group children do not watch people, while the low-income group children do not visit parks to ‘escape the city’. The aforementioned activities are normally considered adult- and/or family-orientated activities, whereas younger children prefer playing on play equipment or games or with toys, as mentioned earlier.

Furthermore, Table 4.10 indicates the activities that the adults engage in. Results in Table 4.10 support the findings of Burgess, Harrison & Limb (1988) and Dunnett, Swanwick & Woolley (2002) that adults mostly accompany children to parks to ensure their safety. Similar to research done by Nembudani (1997) in Gugulethu and Walters (2001) in Bellville, an interesting class difference is observed in the activities that the adults participate in. The lower the income, the fewer adults accompany their children to parks, which is in contrast to the aforementioned results of the children. The class-differentiated trend is proven by one high-income group respondent stating, “Children do not play in the park as they use to. It is sad, but it is too dangerous to leave them alone.” In contrast, the middle-income group respondents did not explicitly comment about accompanying their children to parks, whereas two of the low-income group respondents said, “Parents must accompany their children to parks at all times” and that “Some adults are unable to visit parks because of distance problems.” This result also confirms results in Figure 4.1 that more adults than children have indicated that they never visit parks.

Resting/relaxing is popular among the high- and middle-income group adults (Table 4.10). Furthermore, the high-income group adults also enjoy ‘escaping the city’, while 27% of the middle-income group adults walk in parks. Although the low-income group adults like to rest/relax as well, they also prefer, correspondingly to findings of Byrne & Wolch (2009); Gobster (2002); Ho et al. (2005); Payne, Mowen & Orsega-Smith (2002), socially orientated passive activities, such as socialising, having a picnic and barbequing. Activities ranking the lowest among the adults are more or less similar across all of the income groups. The activities include working, rollerblading/skateboarding, playing games, playing on play equipment and other activities, which were not defined by the middle- and low-income group respondents. The other activities that the

high-income group children and adults engage in are conducting neighbourhood watches, quad biking, playing golf, taking wedding photos and flying radio-controlled helicopters.

Table 4.11 Activities of other residents in parks¹⁵

Activities in which other residents participate in parks	High-income (n = 413)	Middle-income (n = 386)	Low-income (n = 489)	All income groups (n = 1288)
Active activities				
Walk the dog	23% (n = 93)	10% (n = 38)	11% (n = 52)	14% (n = 183)
Walk	18% (n = 74)	9% (n = 33)	7% (n = 32)	11% (n = 139)
Exercise	13% (n = 52)	6% (n = 23)	7% (n = 34)	9% (n = 109)
Jog	14% (n = 59)	7% (n = 25)	5% (n = 25)	9% (n = 109)
Play sports	11% (n = 46)	9% (n = 35)	5% (n = 25)	8% (n = 106)
Play on play equipment	13% (n = 54)	5% (n = 18)	7% (n = 34)	8% (n = 106)
Play frisbee/toys	10% (n = 43)	4% (n = 17)	5% (n = 26)	7% (n = 86)
Cycle	8% (n = 31)	5% (n = 19)	5% (n = 24)	6% (n = 74)
Rollerblade/skateboard	8% (n = 31)	3% (n = 10)	5% (n = 25)	5% (n = 66)
Play games	6% (n = 24)	3% (n = 11)	5% (n = 26)	5% (n = 61)
Other activities	2% (n = 6)	3% (n = 11)	7% (n = 36)	4% (n = 53)
Passive activities				
Rest/relax	18% (n = 76)	9% (n = 35)	8% (n = 39)	12% (n = 150)
Socialise	15% (n = 61)	9% (n = 35)	10% (n = 49)	11% (n = 145)
Accompany other children	17% (n = 70)	9% (n = 33)	7% (n = 32)	11% (n = 135)
Date	10% (n = 41)	6% (n = 23)	10% (n = 49)	9% (n = 113)
Have a picnic	11% (n = 46)	5% (n = 21)	9% (n = 44)	9% (n = 111)
Watch people	8% (n = 34)	7% (n = 26)	10% (n = 51)	9% (n = 111)
View landscape/nature	13% (n = 55)	6% (n = 24)	7% (n = 32)	9% (n = 111)
'Escape the city'	15% (n = 63)	5% (n = 19)	3% (n = 16)	8% (n = 98)
Barbeque	5% (n = 22)	4% (n = 15)	12% (n = 56)	7% (n = 93)
Observe wildlife/nature	10% (n = 41)	4% (n = 17)	3% (n = 12)	5% (n = 70)
Work	3% (n = 14)	3% (n = 11)	7% (n = 34)	5% (n = 59)

Note: Percentages do not total 100 due to multiple responses.

Interestingly, 'walking the dog', which is seen as one of the most important activities people partake in internationally (Dunnett, Swanwick & Woolley 2002; Hansen 2006; Swanwick, Dunnett & Woolley 2003), does not feature prominently with children in the middle- and low-income groups (Table 4.10). Nonetheless, more adults than children walk their dogs in all of the income groups, with most dogs being walked by the high-income group adults. In contrast, the low-income group children and adults rarely walk their dogs in parks. However, most of the respondents in all

¹⁵ Other residents in Table 4.11 refer to the other residents who visit parks, in other words, when the respondents visit parks, what are the activities they see the other residents participate in?

income groups indicated that ‘other residents’ walk their dogs as the most frequent activity these ‘other residents’ engage in (Table 4.11). Activities ‘other residents’ prefer to participate in are very similar to the activities the adults engage in (refer to Table 4.10).

4.4.6 Reasons for park non-use

Correspondingly to the findings of Geoffrey et al. (2005) and Henderson et al. (2001), the main concerns that the respondents in all income groups have about park usage appear to be of an intrapersonal and structural nature. Table 4.12 indicates the reasons why some of the respondents never use parks, but these can also be interpreted as the reasons why they do not make even more use of parks. Lack of security and fear of crime is not only an international phenomenon as the main reason preventing park visits,¹⁶ but also ranks as the number one reason why 31% of the respondents in all income groups do not visit parks as often as they want to (Table 4.12). Safety concerns of adults can influence the way in which they socialise their children to participate in recreation and determine whether children and adults use parks or not (Dunnett, Swanwick & Woolley 2002; Geoffrey et al. 2005; Tucker, Gilliland & Irwin 2007). In other words, if adults fear their children’s safety in parks, they may not allow their children to visit parks. Due to the lack of recreation socialisation in parks during childhood, the children may most probably not visit parks as adults either, which creates a cycle of park non-use that is passed on from generation to generation.

Safety concerns of the respondents were expressed by one high-income group respondent who said, “People are afraid to go [to parks] alone, even if [they are] walking a dog.” The following statements are reflective of the middle-income group’s opinions: “[We want] a quiet and safe [park] space where we do not constantly have to look over our shoulders,” “A place where I can go with my family without a fear of being mugged” and “[Parks are] not fit to play in, not even to walk your dog in, because it is a danger to adults and children.” The low-income group respondents expressed their safety concerns as follows: “Please, [parks] must be secured, because there is too much crime in the area. Even if you go with your child you are not safe” and “We have small children who want to play in [parks], but it is not good for them.”

Antisocial behaviour in parks can also be an intimidating factor (Burgess, Harrison & Limb 1988; Hansen 2006; Page, Nielsen & Goodenough 1994). The aforementioned is not only stated in the literature, but is also seen in the current study, with almost one-third of the respondents in all

¹⁶ (Azuma et al. 2006; Geoffrey et al. 2005; Hansen 2006; Ho et al. 2005; Madge 1997; Mitchell 1995; Ravenscroft & Markwell 2002).

income groups indicating a problem with drunks, drug users and gangs in parks (Table 4.12). The respondents in the middle- and low-income groups have a negative image of drunks, drug users and gangs in parks, as this particular reason is seen as the number one reason why they never visit parks or only visit them irregularly. The negative image of antisocial characters and antisocial behaviour is visible throughout the middle- and low-income group respondents' responses, with one middle-income group respondent saying, "Remove the problem of vagrants, drug users and the potential violence that accompanies this problem." Two low-income group respondents summarised their fear of antisocial behaviour as follows: "Many people use parks, but the way [in which they use it] is the problem" and "Keep our parks clean, free of drugs and gangsters." In contrast, 24% of the high-income group respondents experience problems with homeless people in parks in their suburbs. The aforementioned may occur because homeless people migrate to parks that are more established and have a greater variety of park facilities (which is mostly located in high-income suburbs), because they utilise the park spaces and park facilities as living/sleeping spaces, similarly to the homeless people in the study of Mitchell (1995).

Table 4.12 Reasons for park non-use

Reason for park non-use	High-income (n = 413)	Middle-income (n = 386)	Low-income (n = 489)	All income groups (n = 1288)
Lack of security and safety	28% (n = 114)	37% (n = 141)	30% (n = 149)	31% (n = 404)
Drunks, drug users and gang problems	14% (n = 58)	47% (n = 183)	30% (n = 149)	30% (n = 390)
Too little time available	34% (n = 141)	29% (n = 113)	22% (n = 110)	28% (n = 364)
Lack of maintenance of the park	17% (n = 69)	26% (n = 102)	20% (n = 97)	21% (n = 268)
Lack of facilities in the park	16% (n = 67)	26% (n = 101)	19% (n = 92)	20% (n = 260)
Fear of sexual attacks	14% (n = 58)	28% (n = 108)	19% (n = 92)	20% (n = 258)
Litter and vandalism	16% (n = 67)	32% (n = 124)	13% (n = 63)	20% (n = 254)
Homeless people are around	24% (n = 99)	22% (n = 83)	14% (n = 68)	19% (n = 250)
Not enough trees and nature	7% (n = 28)	22% (n = 83)	24% (n = 115)	18% (n = 226)
Park is not big enough	5% (n = 20)	15% (n = 59)	20% (n = 100)	14% (n = 179)
Fear of racial attacks	8% (n = 31)	10% (n = 39)	21% (n = 102)	13% (n = 172)
Park is too far away	4% (n = 17)	11% (n = 43)	21% (n = 104)	13% (n = 164)
Visit other parks or conservation/biodiversity areas	11% (n = 46)	11% (n = 44)	12% (n = 60)	12% (n = 150)
Lack of parking	6% (n = 25)	9% (n = 33)	17% (n = 83)	11% (n = 141)
Pet problems	7% (n = 27)	10% (n = 40)	15% (n = 71)	11% (n = 138)
Conflict between park users	3% (n = 12)	11% (n = 42)	12% (n = 59)	9% (n = 113)
Park is too crowded	1% (n = 3)	6% (n = 25)	14% (n = 69)	8% (n = 97)
Not easily accessible	1% (n = 4)	3% (n = 12)	10% (n = 49)	5% (n = 65)
Other reasons for not visiting the park	4% (n = 16)	2% (n = 8)	5% (n = 25)	4% (n = 49)
Invisible/concealed areas in the park	1% (n = 4)	3% (n = 11)	7% (n = 33)	4% (n = 48)
Disabled	1% (n = 4)	3% (n = 10)	6% (n = 27)	3% (n = 41)

Note: Percentages do not total 100 due to multiple responses.

As corroborated by studies conducted by Dunnett, Swanwick & Woolley (2002); Geoffrey et al. (2005); Walters (2005), results of the current study (Table 4.12) show that working unsociable hours can have a negative impact on park usage. Overall, 28% of the respondents in all income groups indicated limited time availability as a problem when planning to visit parks. Lack of time appears to be especially problematic in the high-income group, as just over one-third of these respondents (34%) indicated it to be the main reason why they do not visit parks, or only visit them infrequently.

Maintenance concerns, in the form of litter and vandalism (Azuma et al. 2006; Hansen 2006; Jansen van Vuuren 2005), also occur in parks in the City of Cape Town and it is especially problematic for the middle-income group respondents (Table 4.12). One high-income group respondent said, “[Parks] breed unwanted loitering,” while other respondents declared that their “Park is well maintained by a very committed community” and that “[The community] would love to visit parks, if it is more carefully managed, properly maintained and protected.” The middle-income group respondents complained that “existing [parks are] neglected and insufficient” and that “[parks] always look messy – the community uses it as a dumping ground.” One low-income group respondent stated, “Some parks are being destroyed and have not been repaired yet.”

A structural concern of parks being considered monotonous, sterile and boring (Burgess, Harrison & Limb 1988; Giles-Corti et al. 2005; Hansen 2006; Rishbeth 2001) is also reflected in the low-income group respondents’ responses. There are a lack of trees, natural vegetation and facilities in parks in low-income areas (Table 4.12). One low-income group respondent indicated, “[Parks] are nothing to speak off. [Parks are] dry fields and it does not look like parks – it is barren, dull, unattractive and too small.” The middle and low-income group respondents’ concerns for a bigger park were expressed through one low-income group respondent who said, “A larger park for general use [would be] appreciated.”

Disability, invisible/concealed areas in parks and ‘other reasons’ are the least important as to why the respondents in all income groups do not visit parks (Table 4.12). Interestingly, the high-income group respondents responded the most to ‘other reasons’ why they do not visit parks. The high-income group respondents indicated that their children play at home in their own gardens, their children play sports at sports clubs or schools, that parks are not easily accessible because the roads that surround parks are too busy and require speed bumps, and that their children are too old to go to parks. One high-income group respondent indicated, “Parks are not aimed at [teenagers], at the age when [they] require safe places to exercise.” One middle-income group respondent indicated

that his/her family has a park-like facility at home and consequently does not need to visit parks. Meanwhile, the low-income group respondents stated that they are not interested in going to parks as the main ‘other reason’ why they do not visit parks.

4.5 OUTDOOR RECREATION PLACES

The respondents were asked where children and adults spend most of their outdoor recreation time. Table 4.13 shows that the majority of the children and adults in all income groups spend most of this time at home. The school is the second most favoured place where just over half of the children in all income groups spend their outdoor recreation time, whereas the adults in all income groups prefer other parks or conservation/biodiversity areas in other suburbs. Sports grounds are also popular among the children and adults in all income groups. Interestingly, spending time in their park is only the fifth most important outdoor place for the children and adults in all income groups for recreation.

Table 4.13 Outdoor recreation of children and adults

Outdoor recreation location	High-income		Middle-income		Low-income		All income groups	
	Children (n = 1147)	Adults (n = 718)	Children (n = 933)	Adults (n = 538)	Children (n = 1200)	Adults (n = 721)	Children (n = 3200)	Adults (n = 1977)
At community centre	4% (n = 17)	6% (n = 24)	7% (n = 25)	10% (n = 37)	12% (n = 59)	19% (n = 91)	8% (n = 101)	12% (n = 152)
At school	51% (n = 212)	4% (n = 18)	47% (n = 180)	3% (n = 10)	57% (n = 278)	5% (n = 24)	52% (n = 670)	4% (n = 52)
At sports grounds	46% (n = 191)	22% (n = 91)	31% (n = 118)	14% (n = 54)	37% (n = 179)	9% (n = 46)	38% (n = 488)	15% (n = 191)
At home	74% (n = 306)	79% (n = 326)	69% (n = 266)	73% (n = 282)	46% (n = 225)	61% (n = 299)	62% (n = 797)	70% (n = 907)
In the streets surrounding the home	25% (n = 103)	10% (n = 41)	35% (n = 133)	8% (n = 31)	33% (n = 161)	14% (n = 67)	31% (n = 397)	11% (n = 139)
In park	32% (n = 134)	20% (n = 82)	21% (n = 79)	7% (n = 28)	29% (n = 142)	9% (n = 45)	28% (n = 355)	12% (n = 155)
Open pieces of land surrounding the home	21% (n = 85)	10% (n = 42)	18% (n = 68)	9% (n = 34)	17% (n = 82)	18% (n = 90)	18% (n = 235)	13% (n = 166)
Other parks and/or conservation/biodiversity areas in other suburbs	24% (n = 99)	23% (n = 94)	17% (n = 64)	16% (n = 62)	15% (n = 74)	12% (n = 59)	18% (n = 237)	17% (n = 215)

Notes: 1. In Table 4.13, ‘n’ equals the number of responses, not the number of respondents.

2. Percentages do not total 100 due to multiple responses.

The children in the three class groups spend most of their time at home or at school (Table 4.13). Sports grounds and the streets surrounding the homes are also favourable places where they relax and perform recreation activities. Although the majority of the adults in all income groups participate in most of their outdoor recreation at home as well, interclass differences are observed

between the three income groups. The high- and middle-income group adults spend time in other parks and/or conservation/biodiversity areas located in other suburbs and at sports grounds. In contrast, the low-income group respondents indicated that conservation/biodiversity areas are located further away from their homes and they have a low car ownership percentage, which matches the findings of international authors (Gobster 2002; Ho et al. 2005; Zhang & Gobster 1998). The low-income group respondents require public transportation to visit other parks and/or conservation/biodiversity areas in other neighbourhoods, but also lack the financial resources to pay for public transportation. Instead, the low-income group adults spend more time at community centres and open pieces of land surrounding their homes.

Table 4.13 also indicates that the children and adults do not spend so much time in parks (it is the fourth highest place for outdoor recreation in the high-income group and even lower in the middle- and low-income groups.) Some of the respondents might see existing registered parks as only open pieces of land, because there might be no or very little facilities on the land. When adding the parks and open pieces of land surrounding the home scores, the children and adults in all three income groups spend significantly more time in parks or open pieces of land in their neighbourhoods. The percentage of the respondents in the three income groups who spend time in parks and/or conservation/biodiversity areas increases even more when the score of 'other parks and/or conservation/biodiversity areas in other suburbs' is added to the aforementioned score.

4.6 CONCLUSION

Class distinctions have a profound effect on park usage. The socio-economic class a respondent belongs to determines his or her overall park perceptions and preferences, but also the usage of parks as recreation areas. Park usage includes how the different income groups use urban national parks, conservation/biodiversity areas and parks. Park usage comprises of the following: frequency of park usage, time spent in parks, distances to parks, mode of transport used to get to parks, activities the respondents and other residents partake in, the main reasons for park non-use and the outdoor recreation options available to the respondents in the three income groups.

As income decreases in the study area, the average household size increases. Home languages, together with common historical knowledge of the racial distributions in the City of Cape Town, indicated that suburbs in the City of Cape Town are highly divided according to race. The racial distribution can be summarised as follows: the majority of the white respondents live in the richer parts of the northern suburbs and in the southern suburbs around the Table Mountain National Park

and Cape Point areas. The coloured respondents stay in the Cape Flats and Atlantis areas and the black respondents mostly reside in the remaining low-income southern suburbs. Furthermore, the lower the income, the fewer the respondents who will own a car and have a home with a private garden.

The high-income group respondents have more conservation/biodiversity areas close to their homes and they visit it more often than the middle- and low-income group respondents. Interestingly, however, the majority of the respondents in all income groups never visit the Table Mountain National Park, which is an example of a conservation/biodiversity area. However, class distinctions are noticeable in the reasons why the three income groups do not visit the Table Mountain National Park. The high-income group respondents visit the Table Mountain National Park every few years. Furthermore, the school programmes of the high-income group children often organise school trips with arranged transportation to visit the Table Mountain National Park. In contrast, the middle- and low-income group respondents do not have the finances, transport and similar school programmes to visit the park. In addition, the higher the income, the more respondents have private gardens and are within reasonable walking distances to parks and within reasonable driving distances to conservation/biodiversity areas. Not surprisingly, the middle- and low-income group respondents mostly want new parks closer to their homes, more than the high-income group respondents.

Not only do the children in all income groups visit parks more often in a week than the adults in all income groups, they also stay in parks for a longer time than the adults in all income groups. Of all the respondents and income groups, the low-income group children visit parks the most and stay the longest. In contrast, the middle-income group children and adults visit parks the least, and spend the shortest amount of time in parks.

Most respondents in the high- and middle-income groups take 0-5 minutes to reach parks, with 6-10 minutes being the second frequent time they need to reach parks. A large proportion of the low-income group respondents have to walk for longer than 15 minutes to reach parks. The most frequent mode of transport that children and adults in all income groups use to reach parks is walking, followed by private transport (driving with a car). Although public transport is not a first choice mode of travel, the low-income group is the most likely to use it if no alternative private transport is available.

The children in all income groups participate more in active recreation, while the adults in all income groups favour passive activities in parks. The higher the income group, the more play

equipment is provided in parks. Consequently, the high-income group children play on play equipment more often. The lower the income group, the more children play games or with toys in parks. This finding signifies that fewer play equipment is provided in parks in lower-income suburbs. Results show that the higher-income group adults prefer to accompany their children to parks more than the lower-income group adults do. In contrast, the low-income group adults engage in socialising activities in parks. More adults than children walk their dogs in the high- and middle-income groups, while walking the dog is the most frequent activity that other residents in all income groups partake in.

The respondents in all income groups experience various problems with park usage, but the most profound and recurrent reason for park non-use is fear. The fear emerges in the form of safety concerns, fear of antisocial problems – such as homeless people, drug users, vandals and gangsters who all use parks for the ‘not so average activities’, maintenance concerns in the form of constant litter and vandalism in parks and lack of facilities and vegetation in parks.

All income groups’ respondents indicated recreating in their own parks as less essential than other outdoor recreation areas. Confusion is evident in what the respondents themselves classify as parks. The respondents (mostly in the low-income group) also see open pieces of land surrounding their homes with no facilities or grass on it as park-like areas, because no alternatives exist. The level of park maintenance and the facilities that are provided in parks may determine if people perceive parks as areas where they can perform recreation activities. If not, they may not visit parks and they may find alternative recreation spaces, such as playing in the streets surrounding their homes or participating in recreation activities on open pieces of land around their homes.

The respondents’ perceptions of service delivery (more specifically park delivery) and their levels of satisfaction with parks influence their actual park usage. Chapter 5 expands on the aforementioned issues and furthermore highlights the main problems the respondents experience with/in parks. In addition, the respondents’ suggestions for creating adequate park environments to increase park usage in the City of Cape Town are also discussed.

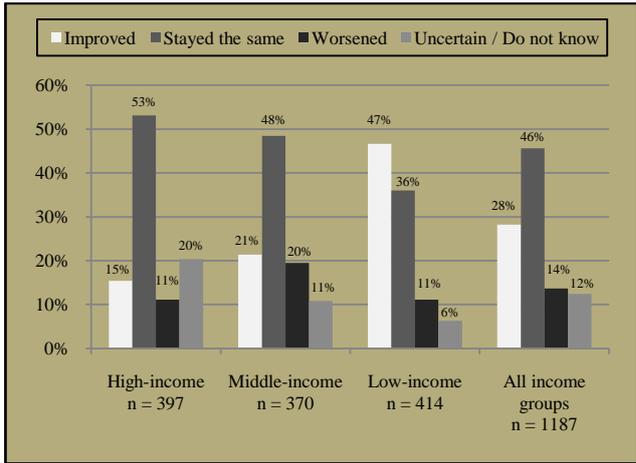
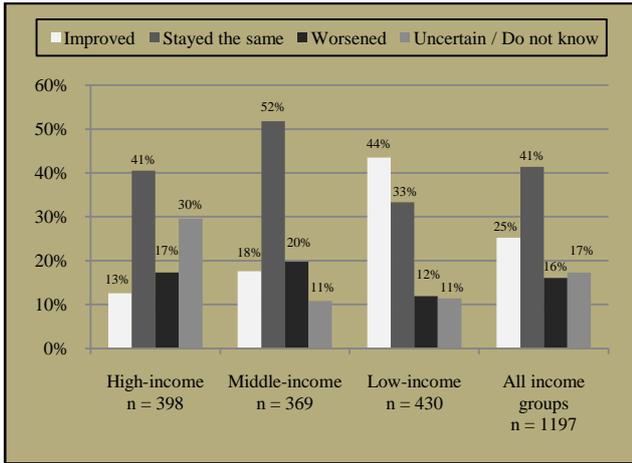
CHAPTER 5: LEVELS OF SATISFACTION WITH PARKS

As an introduction, Chapter 5 discusses the level of contentment with service delivery since the last local government elections and the relative importance of park and recreation services in comparison to other services. Furthermore, the respondents' levels of satisfaction with parks are also indicated. A park satisfaction index was calculated to determine the respondents' perceptions of the quality of park facility management and maintenance in their suburbs. The respondents' motivations for a low rating of park management and maintenance were also analysed. In addition, Chapter 5 includes a nuisance index about the main issues that create problems for the respondents in parks and the driving forces behind these concerns. To counteract the respondents' dissatisfaction with some aspects in parks, the respondents were asked to comment on how park usage can be improved. Achieving better park usage could occur in the form of adding extra facilities to park settings and creating 'ideal park environments' for the respondents. General suggestions about park usage can also go a long way to improve park scenery and the frequency with which the respondents visit parks and the time they spend there.

5.1 IMPORTANCE OF PARKS IN RELATION TO SERVICE-DELIVERY MANDATES

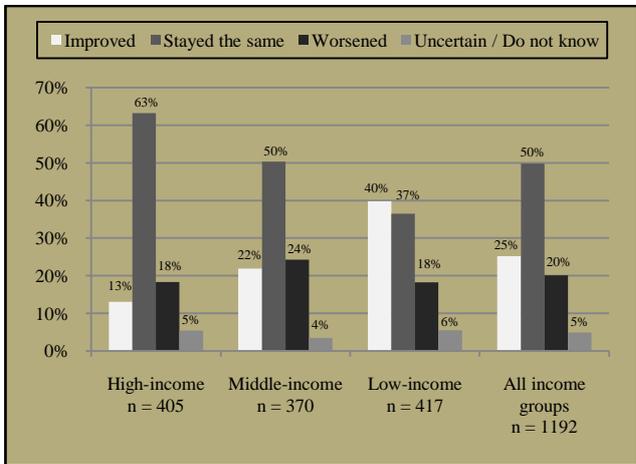
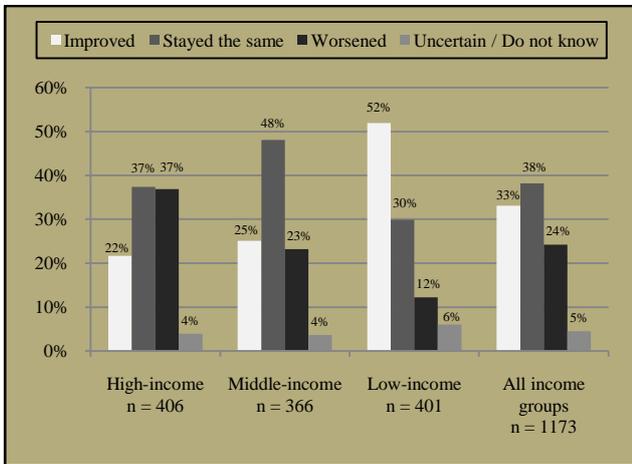
Before determining the respondents' levels of satisfaction with parks, it is firstly important to understand perceptions of service delivery in general in the City of Cape Town. The respondents were asked to indicate how the delivery of six services has changed in their neighbourhoods since the last local government elections. Overall, most respondents in all income groups are the least satisfied with safety and security services, while the delivery of all other services are not satisfactory, since most respondents in all income groups indicated it has stayed the same since the last local government elections (Figure 5.1).

The respondents in the high-, middle- and low-income groups gave related responses to their levels of satisfaction with services since the last local government elections (Figure 5.1). The high- and middle-income group respondents indicated that clinic and health care, housing, road and sidewalk and streetlight services have all stayed the same, while the low-income group respondents indicated that these services have improved. All respondents agreed that park and recreation services have stayed the same and that safety and security services have worsened. The results signify that the high- and middle-income group respondents are not very satisfied with service delivery, whereas the low-income group respondents are generally satisfied with service delivery, probably because of post-apartheid improvements in urban living.



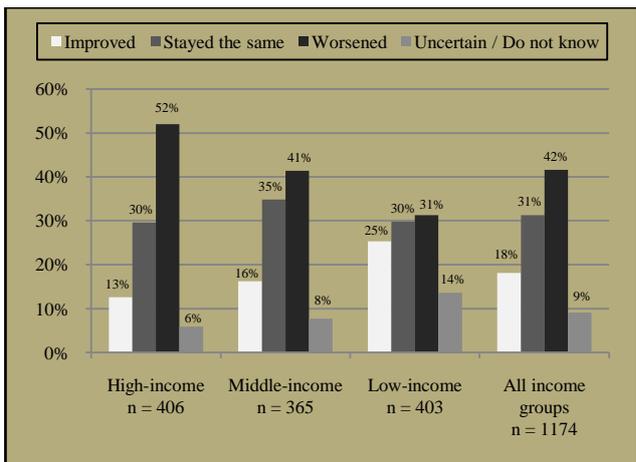
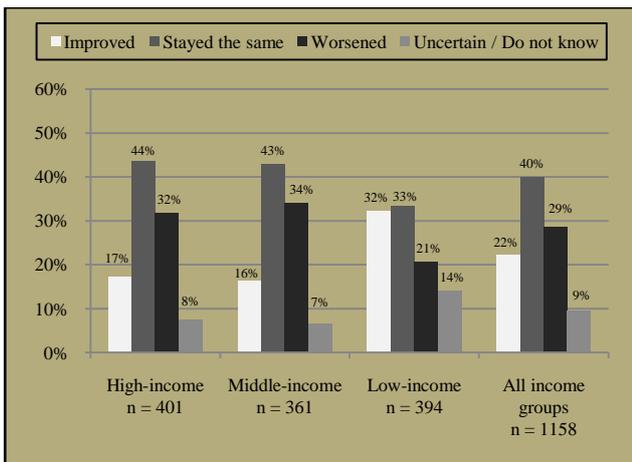
Clinic and health care services

Housing services



Road and sidewalk services

Streetlight services



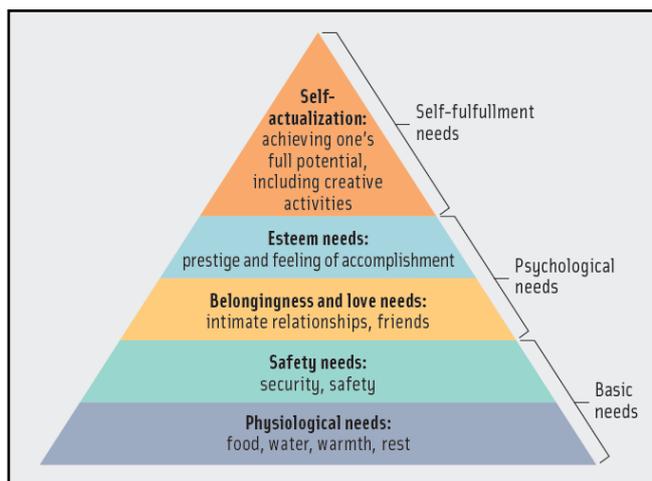
Park and recreation services

Safety and security services

Note: Percentages do not total 100 due to rounding.

Figure 5.1 Levels of satisfaction with service delivery since the last local government elections

Urban parks are an essential service to provide to citizens, but its importance is sometimes overshadowed by seemingly more important services, such as safety and security, housing and health care (Butler-Adam & Franke 1986; Kies 1982). The aforementioned phenomenon of parks and recreation having a lower importance compared to other more crucial services can be explained by Maslow's hierarchy of needs pyramid (Poston 2009) (Figure 5.2). According to Maslow, the body resolves the most basic needs for survival before moving on to more complex needs, higher up in the pyramid.



Source: Poston (2009: 348).

Figure 5.2 Maslow's hierarchy of needs pyramid

The first four components of the pyramid are 'deficit needs' and the fifth component is a 'being need' (Poston 2009). 'Deficit needs' consist of physiological needs (the most basic essential needs for survival – food, water, rest and shelter, for example); safety needs (more psychological in nature); belongingness and love needs (the need to belong at a social level and build relationships with others); and esteem needs (a lower form of self-esteem is to be respected, accepted, recognised and reinforced by others, while a higher form of self-esteem is to have self-respect, a feeling of confidence and competence through one's accomplishments) (Poston 2009). The 'being need' is expressed through self-actualisation. The need can only be accomplished when all the deficit needs have been met to some extent. Self-actualisers focus on what matters most in defining who they are and they are satisfied with and accept themselves, their knowledge and their talents (Poston 2009). The need for leisure (park and recreation services) lies at the second and third levels, which include safety needs and belongingness and love needs. Safety needs does not just include personal and financial security, but also include overall health and well-being (Maslow 1943). Parks may enhance people's overall well-being by breaking continuous building patterns, enhancing overall quality of life, providing better mental health and stress-relief, enhancing people's self-confidence

and independence and providing areas for relaxation (refer to Figure 2.2 in Chapter 2) (Shi et al. 2006). Belongingness and love needs can also be interpreted as being social needs. In other words, people have an inherent need for social connections with others, especially family and friends (Poston 2009). This sense of social connection can be achieved by visiting parks and participating in family-orientated/friend-orientated recreation activities. The aforementioned therefore explains why the value of park and recreation services is sometimes underestimated, compared to the needs for housing, health care and safety and security.

In the survey, the respondents were asked to indicate from a list of services, which two they would like to be improved, and which two they consider the least important (Table 5.1). The basic needs of the majority of the respondents in all income groups are not met, and therefore they focus on it first in the form of safety and security, clinics and health care, and housing. In contrast, most respondents in all income groups see higher order needs of roads and sidewalks and streetlights as not so important to improve. Most respondents in all income groups (36%) indicate park and recreation services as the least important need to fulfil.

Table 5.1 Services that require improvement or no improvement across the City of Cape Town

Service	High-income (n = 413)		Middle-income (n = 386)		Low-income (n = 489)		All income groups (n = 1288)	
	Want service to improve	Do not want service to improve	Want service to improve	Do not want service to improve	Want service to improve	Do not want service to improve	Want service to improve	Do not want service to improve
Clinics and health care	34% (n = 140)	21% (n = 87)	59% (n = 226)	11% (n = 42)	59% (n = 290)	18% (n = 90)	51% (n = 656)	17% (n = 219)
Housing	10% (n = 42)	47% (n = 194)	34% (n = 130)	21% (n = 80)	60% (n = 292)	19% (n = 92)	36% (n = 464)	28% (n = 366)
Parks and recreation	30% (n = 122)	31% (n = 128)	25% (n = 96)	41% (n = 160)	18% (n = 87)	36% (n = 177)	24% (n = 305)	36% (n = 465)
Roads and sidewalks	32% (n = 131)	29% (n = 119)	14% (n = 53)	42% (n = 162)	18% (n = 87)	31% (n = 150)	21% (n = 271)	33% (n = 431)
Safety and security	80% (n = 332)	5% (n = 19)	63% (n = 245)	8% (n = 31)	45% (n = 221)	18% (n = 87)	62% (n = 798)	11% (n = 137)
Streetlights	16% (n = 68)	43% (n = 177)	19% (n = 75)	32% (n = 124)	23% (n = 114)	30% (n = 146)	20% (n = 257)	35% (n = 447)

Note: Percentages do not total 100 due to multiple responses.

Parks and recreation is the fourth most important service to improve in the high- and middle-income groups, after safety, clinics and health care, roads and sidewalks, and housing. For the low-income group respondents, housing, clinics and health care, and safety and security are the three most important services to improve. Parks and recreation is the least important service to improve in the low-income group, together with roads and sidewalks. Although lower-order needs are generally more crucial to fulfil than higher-order needs in all of the income groups, a slight priority shift is

observed between the three income classes. The higher the income, the slightly more the focus is on ‘comfort’ (higher-order needs) such as roads and sidewalks, whereas the lower-income group respondents want more basic human needs (lower-order needs), for example clinics and health care and housing, to be fulfilled first.

5.2 SATISFACTION INDEX

Contentment with parks may influence the respondents’ perceptions, preferences and usage patterns of parks. Satisfaction with parks was tested by asking the respondents to rate the overall quality of a predetermined set of park elements and allowing the respondents to comment on their choices. A park satisfaction index on park facility management and maintenance issues was then determined. The satisfaction index (Table 5.2) indicates mean scores. Percentages closer to 100% indicate ‘excellent’ park facility management and maintenance, closer to 60% shows ‘average’ scores, while percentages below 20% indicate that park facility management and maintenance need improvement. In all three income groups, the location of parks scored the highest index value, whereas toilet facilities are seemingly considered a maintenance issue, because the value receives the lowest index score in all three income groups. The high-income group respondents rated most of the park facility management and maintenance scores as ‘good’, with only some dissatisfaction with safety and security, seats and tables and toilet facilities. The middle- and low-income group respondents rated most of the park facility management and maintenance scores as ‘average’. The results indicate that the perceptions of the respondents in the three income groups about their parks, will determine their levels of satisfaction with those parks. Generally, the higher the income of the respondents, the more satisfied they are with park management and maintenance in their suburbs, while the middle- and low-income group respondents appear to be less satisfied with it.

Table 5.2 Park satisfaction index about park facility management and maintenance

Park satisfaction index about management/maintenance issues	High-income	Middle-income	Low-income	All income groups
Location of parks	84%	69%	68%	75%
General cleanliness	68%	56%	62%	63%
Overall maintenance of parks	65%	53%	60%	61%
State of grass/trees/plants	63%	55%	58%	60%
Play equipment for children	62%	54%	59%	59%
Shaded areas	65%	51%	54%	58%
Parking facilities	63%	54%	56%	58%
Personal safety and security	58%	48%	53%	54%
Seats/benches/tables	50%	42%	56%	51%
Toilet facilities	33%	35%	48%	39%

Note: Table 5.2 indicates mean scores.

The respondents were asked to motivate their park satisfaction scores on park facility management and maintenance if it was 'average' (between 40%-60%), 'poor' (between 20%-40%) or 'very bad' (between 0%-20%). The responses were summarised in different themes of motivations why the respondents indicated a low park satisfaction rating (Table 5.3). The motivations given for each service/facility do not differ significantly between the income groups. Researchers have shown that urban parks must be accessible and proximate for people to use it on a regular basis (Azuma et al. 2006; CSIR 2000; Furuseth & Altman 1991; Harnik & Simms 2004). Various factors (demographic, psychological and environmental) influence park accessibility (Gedikli & Ozbilen 2005; Kaczynski et al. 2009; Seeland & Nicole 2006), which could explain why the location of parks (which encompasses both the accessibility and proximity to parks) received the highest park satisfaction rating among all three income groups (Table 5.3), while some of the respondents across all three income groups still experience two problems with it.

The main problem that 88% (n = 36) of the respondents in the City of Cape Town have with the location of parks is the fact that some parks are too far to walk too. One low-income group respondent said, "Children do not visit parks, because it is [too] far [away] and it is the only one we know." Another low-income group respondent complained about crossing busy streets, which also adds to the inaccessibility of parks: "It is bad. I cannot even explain. Children from our side have to cross a very busy main road to get [to a park]." The finding supports the results in Figure 4.3, which state that the respondents generally do not walk for longer than 15 minutes to reach parks.

Maintenance and issues of cleanliness act as a deterrent for people to use parks (Azuma et al. 2006; Cranz & Boland 2004; Hansen 2006; Jansen van Vuuren 2005). Newspapers of the City of Cape Town report that maintenance is a major park issue. City Parks receives many maintenance complaints, but the backlog is so great that it is difficult to attend to every complaint (Hansen 2009b; Hansen 2009c; Tygerburger 2009c; Tygerburger 2009e). Maintenance complaints are mostly in the form of parks that are filled with litter, homeless people staying in parks and the associated problems that accompany the phenomenon (Hansen 2009b; Hansen 2009c; Tygerburger 2009c). One man, mentioned in Tygerburger (2009e), mowed and cleaned his community's 60x20 metre park with the help of his gardener after the community made several complaints about the park that was not maintained anymore. The aforementioned is an example of how the community can get involved in park maintenance and cleaning, instead of expecting the government to eradicate the backlogs in problems with park maintenance and park cleaning itself.

Table 5.3 Motivations for low park satisfaction rating

Motivation for low park satisfaction rating	High-income	Middle-income	Low-income	All income groups
Location				
Too far to walk too	n = 5	n = 19	n = 12	88% (n = 36)
One has to drive to reach parks	n = 1	n = 1	n = 3	12% (n = 5)
Cleanliness				
Litter	n = 52	n = 71	n = 36	73% (n = 159)
Not cleaned regularly	n = 15	n = 12	n = 10	17% (n = 37)
Lack of personnel to clean	n = 9	n = 5	n = 9	11% (n = 23)
Maintenance				
Not well maintained	n = 72	n = 65	n = 32	13% (n = 169)
Parking				
No parking facilities	n = 62	n = 61	n = 41	76% (n = 164)
Not enough parking spaces	n = 28	n = 18	n = 6	24% (n = 52)
Safety and security				
No security guards	n = 38	n = 54	n = 28	47% (n = 120)
Unsafe	n = 42	n = 24	n = 28	37% (n = 94)
Crime occurs	n = 9	n = 10	n = 5	9% (n = 24)
Occasional security guards are visible	n = 5	n = 6	n = 2	5% (n = 13)
Park surfaces need to be appropriate	n = 2	n = 0	n = 0	1% (n = 2)
Unsafe and crime occurs	n = 0	n = 2	n = 0	1% (n = 2)
No security guards and crime occurs	n = 0	n = 2	n = 0	1% (n = 2)
Play equipment				
Play equipment is in poor condition/ not safe	n = 38	n = 40	n = 16	40% (n = 94)
Need more variety in play equipment	n = 29	n = 29	n = 28	36% (n = 86)
No play equipment	n = 20	n = 19	n = 15	23% (n = 54)
Play equipment is not safe and more variety is needed	n = 1	n = 1	n = 0	1% (n = 2)
Seats/benches/tables				
Not enough seats and no tables	n = 46	n = 68	n = 30	45% (n = 144)
Not enough seats	n = 62	n = 38	n = 25	39% (n = 125)
Seats are broken and vandalised	n = 25	n = 3	n = 1	9% (n = 29)
No tables	n = 13	n = 4	n = 2	6% (n = 19)
Available seats are not enough and it is broken	n = 2	n = 1	n = 0	1% (n = 3)
Seats are broken and there are no tables	n = 2	n = 0	n = 0	1% (n = 2)
Shaded areas				
No shaded areas	n = 42	n = 62	n = 53	72% (n = 157)
Limited shade only	n = 37	n = 20	n = 3	28% (n = 60)
State of grass/trees/plants				
Very little grass planted / just sand	n = 52	n = 69	n = 45	84% (n = 166)
Grass is overgrown / trees not felled	n = 22	n = 9	n = 1	16% (n = 32)

Continued overleaf

Table 5.3 continued

Motivation for low park satisfaction rating	High-income	Middle-income	Low-income	All income groups
Toilet facilities				
No toilet facilities	n = 176	n = 123	n = 56	86% (n = 355)
Toilets always broken and dirty	n = 19	n = 13	n = 7	9% (n = 39)
Toilets closed all the time	n = 9	n = 4	n = 0	3% (n = 13)
More toilets needed	n = 3	n = 1	n = 3	2% (n = 7)

Notes: 1. Percentages do not total 100 due to rounding.

2. The columns indicating high-, middle- and low-income only show the number of respondents.

The percentages were removed in these columns because not so many of the respondents answered these questions. Thus, indicating the percentages would create confusion. For example, in the row that indicates 'too far to walk to' under the heading of location, the number of the respondents is only five in the high-income group, which would amount to 83% of the 36 respondents in total. The 19 respondents in the middle-income group would amount to 95% of the 36 respondents, while the 12 respondents in the low-income group equal 80% of the 36 respondents in total. Therefore, indicating the percentages would seem as though a large proportion of the respondents responded on these questions, but in reality, only a few did.

The respondents in the current study expressed similar concerns. Overall, 73% (n = 159) of the respondents in the City of Cape Town indicated that parks are filled with litter and that this creates concern about the cleanliness of parks (Table 5.3). Examples of litter mentioned by the high- and middle-income group respondents are glass, bins that are turned over, used condoms, dog faeces and the overall bad smell in parks. The cleanliness concern extends further to park maintenance problems, which respondents across all income groups only described with one recurrent theme – parks are not maintained well and on a regular basis. The respondents across all income groups want the council to do continuous maintenance on parks by hiring cleaners. Two low-income group respondents indicated, "What was meant to be a park is not" and "[Parks are] used as dumping grounds and it looks dirty and our children can get sick." The middle- and low-income group respondents noted that the upgrading and renewal of parks would please the community and increase their admiration for parks. Furthermore, it would "encourage more social activities and [community] empowerment would occur." The respondents in all the income groups therefore feel that parks that are well maintained and cleaned regularly promotes community interaction. Increased community interaction could allow the community an opportunity to develop a collective voice (bargaining power) to inform the government about their desires for ideal park environments.

Complaints about parking problems in all income groups were about a lack of parking facilities (76%) (n = 164) and not enough parking spaces (24%) (n = 52) (Table 5.3). The high-income group respondents also complained that gravel parking spaces get muddy in the winter, while the

condition of tar surfaces is poor and the parking lines are not clearly painted. The respondents who complained about parking spaces are also possibly the respondents who indicated that the location of parks is an issue because they have to travel further to reach parks, most probably with cars.

Safety and security is mentioned most frequently in the literature and act as an intrapersonal deterrent to park usage. As is also seen in Table 5.3, if people do not feel safe in parks, they will not visit it (Dunnett, Swanwick & Woolley 2002; Madge 1997; Mitchell 1995). Table 5.3 shows seven different motivations as to why safety and security is not satisfactory in parks. The main safety and security apprehensions of the respondents in all income groups are: no security guards visible in parks (47%) (n = 120) and that the respondents feel unsafe in parks (37%) (n = 94). The high- and low-income group respondents feel the most unsafe in parks. The respondents across all income groups also indicated that crime occurs in parks and that security guards are only occasionally observed in parks. The findings in Table 5.3 are similar to the findings in Table 4.12, which indicate that safety and security is a major concern in parks for all the income groups.

Results in Table 5.3 show similar findings to international authors' work (Burgess, Harrison & Limb 1988; Giles-Corti et al. 2005; Hansen 2006; Rishbeth 2001), namely that if parks are considered dull and boring and lack facilities, they do not invite creative play and social interactions to occur there. Overall, 40% (n = 94) and 76% (n = 86) of the respondents in all income groups experience problems with the safety of play equipment and the need for more variety in play equipment respectively. Most high- and middle-income group respondents also indicated that play equipment is in a poor condition, or is not safe for children to play on. In addition, the high-income group respondents complained that broken play equipment is seldom fixed and that the existing play equipment needs to be cleaned regularly. In contrast, most low-income group respondents complained that parks in their neighbourhoods do not have any play equipment, and where play equipment is provided, it needs more variety. To summarise, socio-economic distinctions are evident in how play equipment is perceived in the three income groups, with the high- and middle-income group respondents appearing to have more and more variety in play equipment in their suburbs, while low-income areas lack the most basic play equipment.

People will visit parks less if they have added safety concerns and discomfort due to park furniture, such as seats/benches, tables and play equipment, not being optimally maintained (Cranz & Boland 2004; Hansen 2006; International Federation of Parks and Recreation Administration 2006; Madge 1997). The aforementioned could explain why the state of seats/benches and tables in parks received the second most motivations as to why it creates dissatisfactory park environments for the

respondents (Table 5.3). Overall, 45% (n = 144) of the respondents in all income groups said that there are not enough seats and no tables in parks. Most middle- and low-income group respondents also complained that parks do not have enough seats and contain no tables where they can relax. In addition, the middle-income group respondents indicated that seats should be comfortable to allow the elderly to use parks as well. In contrast, most high-income group respondents stated that their parks do not contain enough seats, and where they do, the seats are broken and vandalised. Vagrants and vandals prefer to go to parks in higher-income suburbs because they are better equipped with play equipment, seats and tables, similarly to the findings of Mitchell (1995). As a result, the park furniture is broken and vandalised in the process. However, the low-income group respondents, and to a lesser extent the middle-income group respondents, have fewer park furniture available where vagrants and vandals can go. Accordingly, vagrants and vandals will migrate more towards parks in high-income suburbs.

The respondents also had aesthetic and management concerns regarding parks, which correspond with research done by Pasaogullari & Doratli (2004) in which it was found that parks have to be physically attractive and well maintained for people to use them often. The majority of the respondents in all income groups indicated parks have no shade 72% (n = 157), while 84% (n = 166) of the respondents indicated that their parks do not have grass (Table 5.3). Overall, 62 and 53 of the middle- and low-income group respondents do not have trees to create shade in parks. The high-income group respondents have the most shade in parks of all three income groups, because only 42 respondents complained about the lack of shade in parks. In addition, 69 and 45 of the middle- and low-income group respondents specified that park surfaces mostly consist of just sand, compared to 52 high-income group respondents who said that their parks have some areas where only limited grass is planted.

One pleading low-income group respondent summarises the low-income group's concerns about the lack of grass and trees as follows: "At least they must plant some trees and have some grass." Another low-income group respondent also indicated that his/her ideal park "should just be planted with grass." The aforementioned respondents in the three income groups who indicated that their parks lack trees and grass may consider open pieces of land as park-like areas, because no alternative parks exist, which highlights the shortage of park service delivery in these areas. Where park surfaces are planted with grass and some trees are around, the main concerns among all income groups are that grass is persistently overgrown and filled with thorns and weeds, while trees are not felled on a regular basis and soil has poor drainage, which causes muddy ground. The essence of the aforementioned aspects is that there are areas in the three income groups where parks

do not have the appropriate surfaces. Parks should be planted with grass and have trees in order to create an enjoyable park atmosphere in all three of the income groups. However, the middle- and low-income groups appear to be the most affected by the lack of planted grass and trees. The result is that the respondents may visit parks less.

As stated earlier, toilet facilities received the lowest index score, which indicate that it creates the most dissatisfaction in parks (Table 5.3). Overall, 86% (n = 355) of the respondents in the City of Cape Town indicated that parks in their neighbourhoods do not have any toilet facilities. Where toilets are provided, the respondents complained that toilets are always broken and dirty, while the high- and middle-income group respondents indicated that toilets are closed all the time. The high- and middle-income group respondents also stated that they are too scared to use existing toilets and that homeless people sleep in toilets, but also added that toilets would lure more homeless people to parks, as they can then stay in the toilets. The low-income group respondents want to add the most new toilet facilities to parks of all the income groups.

5.3 NUISANCE INDEX

Based on international literature, four issues were chosen for the respondents to indicate whether they create a level of irritation or nuisance for them when they visit parks.¹⁷ Problems with vandalism and litter, homeless people, drunks and drug users were selected to create a nuisance index, because it is mentioned as recurrent park problems in the aforementioned literature. More in-depth explanations were required from the respondents to determine the actual causes of these two nuisance aspects. Dogs and youngsters were chosen as nuisances, because it was thought that these two aspects would not necessarily be indicated as nuisances if the respondents were not prompted for an answer. A nuisance index was calculated, indicating mean scores (Table 5.4). Percentages closer to a 100% indicate that there is 'always' a nuisance, 50% indicates 'seldom' and percentages closer to 0% indicate 'never'.

The percentages in Table 5.4 are mostly between 40% and 60%, which indicate that the majority of the respondents in all income groups seldom experience nuisances in parks. However, when nuisance is experienced in all income groups, it is mostly in the form of vandalism and litter (59%) and homeless people, drunks and drug users (58%). Overall, two-thirds of the middle-income group respondents experience the most nuisance in parks, also in the form of vandalism and litter.

¹⁷ (Dunnett, Swanwick & Woolley 2002; Hansen 2006; Madge 1997; Mitchell 1995; Payne, Mowen & Orsega-Smith 2002).

Table 5.4 Nuisance index of parks

Nuisance	High-income	Middle-income	Low-income	All income groups
Vandalism and litter	56%	66%	51%	59%
Homeless people, drunks and drug users	53%	64%	52%	58%
Dogs	40%	51%	48%	47%
Youngsters	27%	53%	50%	43%

Note: Table 5.4 indicates mean scores.

Table 5.5 indicates the reasons the respondents gave for the particular nuisances. The respondents across all income groups experience problems with all four nuisance factors in the nuisance index (refer to Table 5.4). However, the extent to which a particular motivation leads to a nuisance differs slightly between income groups. Internationally, if parks are filled with litter and vandalism, people do not visit it often, because it is not aesthetically pleasing to spend time there (Azuma et al. 2006; Hansen 2006; Jansen van Vuuren 2005; Pasaogullari & Doratli 2004). Results in Table 5.5 confirm the findings in Table 5.4, and the findings in the international literature, that vandalism and litter create the most nuisance in parks, because 89% (n = 114) of the respondents in all income groups indicated that vandalism and litter make them feel unsafe when visiting parks. The respondents in all income groups also said that bins that are rarely emptied add to the litter problem in parks. Another problem only 9% (n = 12) of the respondents experience in parks is people breaking play equipment.

Antisocial problems and the behaviour of homeless people, drunks and drug users also cause the majority of the respondents in all income groups to feel uncomfortable in parks (Table 5.5). The unpleasant feeling that homeless people create for the high-income group respondents results from the fact that they do not have any respect for park environments. Homeless people's bedding, clothes and litter are scattered all over in parks, while they lie around drunk. Furthermore, the high- and middle-income group respondents indicated that homeless people harass children by begging, shouting and swearing at them and they chase the children away. The respondents in all income groups also added that teenagers use parks to drink there. Open-ended questionnaire responses indicate that vandalism and litter and homeless people, drunks and drug users that are always in parks create the most nuisances in parks in all three income groups.

The debate about allowing dogs in parks is not only an international phenomenon (Dunnett, Swanwick & Woolley 2002; Hansen 2006; Rishbeth 2001), because overall, 67% (n = 62) of the respondents in the City of Cape Town said that dogs without leashes create the most trouble when visiting parks (Table 5.5).

Table 5.5 Motivations for nuisance created in parks

Motivation for nuisance created in parks	High-income	Middle-income	Low-income	All income groups
Vandalism and litter as a nuisance				
Vandalism and litter make people feel unsafe in parks	n = 36	n = 49	n = 29	89% (n = 114)
People break play equipment	n = 2	n = 5	n = 5	9% (n = 12)
Vandalism and litter is not a big problem	n = 1	n = 0	n = 0	1% (n = 1)
People break play equipment and people do not feel safe in parks	n = 0	n = 1	n = 0	1% (n = 1)
Homeless people, drunks and drug users as a nuisance				
Homeless people and drunks are always in parks	n = 42	n = 30	n = 23	63% (n = 95)
Homeless people, drunks and drug users are always in parks	n = 2	n = 19	n = 17	25% (n = 38)
People use parks for drug use	n = 2	n = 5	n = 2	6% (n = 9)
Homeless people, drunks, drug users and teenagers who drink are always in parks	n = 0	n = 2	n = 2	3% (n = 4)
Teenagers drink in parks	n = 2	n = 0	n = 1	2% (n = 3)
Homeless people and drunks are always in parks and teenagers drink in parks	n = 1	n = 1	n = 0	1% (n = 2)
Dogs as a nuisance				
Dogs without leashes create problems	n = 13	n = 22	n = 27	67% (n = 62)
Dogs are a problem	n = 8	n = 2	n = 9	20% (n = 19)
Dogs bark all the time	n = 1	n = 1	n = 8	11% (n = 10)
Dogs are a problem and they bark all the time	n = 1	n = 0	n = 0	1% (n = 1)
Dogs are a problem especially when they are without leashes	n = 0	n = 1	n = 0	1% (n = 1)
Youngsters as a nuisance				
Youngsters are problematic in parks	n = 2	n = 8	n = 29	65% (n = 39)
Youngsters use drugs in parks	n = 2	n = 13	n = 5	33% (n = 20)
Youngsters are problematic and they use drugs in parks	n = 0	n = 1	n = 0	2% (n = 1)

Notes: 1. Percentages do not total 100 due to rounding.

2. The columns indicating high-, middle- and low-income only show the number of respondents. The percentages were removed in these columns because not so many of the respondents answered these questions. Thus, indicating the percentages would create confusion. For example, in the row that indicates 'dogs without leashes create problems' under the heading of dogs as a nuisance, the number of the respondents is only 13 in the high-income group, which would amount to 57% of the 62 respondents in total. The 22 respondents in the middle-income group would amount to 85% of the 62 respondents, while the 27 respondents in the low-income group equal 61% of the 62 respondents in total. Therefore, indicating the percentages would seem as though a large proportion of the respondents responded on these questions, but in reality, only a few did.

The low-income group respondents experience the most problems with dogs in parks, which include dogs being without leashes, dogs simply being an inconvenience and dogs barking all the time

(Table 5.5). An additional problem that the high- and middle-income group respondents experience with dogs in parks is that some vagrants also have dogs that create a nuisance in parks. Most of the respondents' concerns about dogs are represented by three quotes from low- and high-income group respondents. The low-income group respondent said, "Dogs do not always listen to their people." A high-income group respondent indicated that "dogs run loose, which then drives others away," while another respondent advised dog owners to "pick up their dog's faeces." However, one high-income group dog lover feels strongly about allowing dogs in parks: "If children can run around screaming and have plastic bicycles that make a dreadful noise, dogs should be allowed to run free as well."

In contrast to international literature, in which it is reported that the elderly mostly experience conflicting interests with children in parks (Payne, Mowen & Orsega-Smith 2002; Tinsley, Tinsley & Croskeys 2002), results for the City of Cape Town give responses of children and adults of various ages who feel that youngsters are a problem in parks (Table 5.5). Overall, 65% (n = 39) of the respondents in the City of Cape Town indicated that youngsters are a nuisance in parks, with the low-income group respondents experiencing the most problems with youngsters in parks. Interestingly, it would appear that the low-income group respondents experience fewer problems with youngsters using drugs in parks than the middle-income group respondents. However, when looking at the open-ended questionnaire responses it is clear that 'youngsters being problematic in parks' in Table 5.5 include youngsters using drugs in the low-income group. One middle-income group respondent complained, "[Parks are located close to my home, but] unemployed youngsters are hanging [out] there engaging in drugs." One concerned low-income group respondent said, "[A park] is not a place where your children can play, because gangsters smoke dagga and 'tik' there." The respondents in all three income groups justify their concerns with regards to drug use in parks, by stating that enhanced drug activity by regular drug users in parks, may encourage more children to participate in this unwanted activity. Furthermore, drug use is associated with other social misdemeanours such as theft and violence in order to obtain money to purchase the drugs. Further problems that youngsters cause for the high- and middle-income group respondents are listening to loud music, driving quad bikes and kissing in public in parks.

5.4 FACILITY NEEDS AT PARKS

The respondents could indicate which facilities they would like to be developed in their parks. The facilities that the respondents listed as important to have in parks (Table 5.6) correspond with the literature on safety and aesthetic recommendations listed in Appendix F. (Appendix F contains the

literature's recommendations for better park usage). Overall, 29% of the respondents in all income groups indicated the need for improvement of security facilities in parks, followed by a quarter of the respondents who stated that safer and more play equipment is crucial. Adding more park furniture and planting grass and trees are also important facilities to improve parks in all of the income groups. Facilities that are considered the least important to add in all of the income groups include drinking water, parking facilities, rubbish bins and sufficient lighting.

Table 5.6 Facilities to be developed in parks

Facilities to be developed in parks	High-income (n = 413)	Middle-income (n = 386)	Low-income (n = 489)	All income groups (n = 1288)
Security guards and safety cameras	31% (n = 126)	29% (n = 113)	28% (n = 139)	29% (n = 378)
Safer and more play equipment	24% (n = 98)	32% (n = 125)	21% (n = 102)	25% (n = 325)
More park furniture	19% (n = 78)	15% (n = 58)	11% (n = 55)	15% (n = 191)
Plant grass and trees	12% (n = 49)	11% (n = 44)	14% (n = 68)	13% (n = 161)
Restrooms with cleaning staff every day	15% (n = 63)	13% (n = 51)	7% (n = 32)	11% (n = 146)
Sufficient lighting to use parks in day and at night	3% (n = 11)	2% (n = 9)	4% (n = 20)	3% (n = 40)
Rubbish bins	5% (n = 19)	3% (n = 12)	2% (n = 8)	3% (n = 39)
Secure/safe parking facilities	3% (n = 11)	2% (n = 9)	3% (n = 15)	3% (n = 35)
Drinking water	2% (n = 9)	3% (n = 10)	1% (n = 4)	2% (n = 23)

Note: Percentages do not total 100 due to multiple responses.

Security guards, safety cameras and safer and more play equipment were also mentioned most frequently in all three income groups. Security guards and safety cameras might have a high score because of the respondents' complaints about social and maintenance problems that occur in parks on a regular basis. The respondents possibly mentioned safer and more play equipment because current equipment is not safe, or they need more variety, or there are no or very limited play equipment available in their parks (refer to Table 5.3.) Although the respondents mentioned the same facilities to develop in parks, class differences are clearly manifested in the need for additional park infrastructure (Table 5.6). The low-income group respondents who have the least equipment in their parks ask for the most basic equipment, such as seesaws, swings and slides. No high-income group respondent asks for the most basic equipment, but rather luxury/modern play equipment, such as jungle gyms, rocking horses, more educational play equipment with more colours, sandpits for children and putt-putt courses. For the high-income group respondents, adding play equipment extends to adding more park furniture, such as tables with umbrellas, benches with a shelter over it to use in the winter and summer and more equipment/furniture for adults.

5.5 CREATING 'IDEAL PARKS'

The respondents could specify what their households' ideal parks look like. Most respondents across all income groups indicated, in accordance with other researchers' work (Azuma et al. 2006; Pasaogullari & Doratli 2004; Payne, Mowen & Orsega-Smith 2002), that they want their ideal parks to be clean, spacious, green and flat with pretty gardens or nice scenery and shade (Table 5.7). Sports facilities, such as cycling/jogging tracks, skateboarding/rollerblading facilities, tennis, cricket, rugby, soccer, netball and boating facilities, are also important to 11% of the respondents in all income groups. The need for clean, spacious, green and flat parks can also be an indication that children want to play more sports, as such facilities are required for sports to be played. The finding corresponds with the finding that many children in all income groups play sports in parks (refer to Table 4.10). Tuck shops nearby, paved walkways, wildlife and water received the lowest scores for ideal parks in all income groups.

Table 5.7 What do the respondents' ideal parks look like

What do the respondents' ideal parks look like	High-income (n = 413)	Middle-income (n = 386)	Low-income (n = 489)	All income groups (n = 1288)
Clean, spacious, green and flat	23% (n = 96)	12% (n = 46)	14% (n = 67)	16% (n = 209)
Pretty gardens / nice scenery / shade	19% (n = 79)	7% (n = 28)	14% (n = 69)	14% (n = 176)
Sports facilities	10% (n = 42)	14% (n = 55)	8% (n = 41)	11% (n = 138)
Safe, fenced parks with controlled free access	4% (n = 16)	7% (n = 26)	10% (n = 47)	7% (n = 89)
Sections in the parks	10% (n = 43)	7% (n = 26)	2% (n = 10)	6% (n = 79)
Wildlife and river/dam/pond/lake/swimming pool	6% (n = 24)	3% (n = 11)	1% (n = 4)	3% (n = 39)
Paved walkways	4% (n = 15)	0.3% (n = 1)	0% (n = 0)	1% (n = 16)
Tuck shops nearby parks	1% (n = 3)	0% (n = 0)	1% (n = 3)	1% (n = 6)

Note: Percentages do not total 100 due to multiple responses.

Almost a quarter of the high-income group respondents and 14% of the low-income group respondents also require clean, spacious, green and flat park atmospheres, followed by aesthetically pleasing park surroundings (Table 5.7). In contrast, the middle-income group respondents see sports facilities that are integrated into parks as ideal park settings. In addition, one-tenth of the low-income group respondents require controlled free access to safe and fenced parks. The need for sections in parks for multiple uses is not just an international phenomenon (International Federation of Parks and Recreation Administration 2006; Mitchell 1995), but is also mentioned by 10% of the high-income group respondents who wish to participate in various activities in parks.

5.6 COMMENTS AND SUGGESTIONS ABOUT PARK USAGE

The respondents were given an opportunity to make general comments and suggestions about park usage. In general, aspects mentioned by the respondents about park usage correspond with suggestions mentioned in the literature in Appendix F. Comments or suggestions made by the respondents in all income groups in connection with park usage indicate that park maintenance and cleaning parks daily should be the two main priorities of park managers (Table 5.8). However, regular maintenance and cleaning are not the only important aspects to consider when creating ideal parks. According to 10% of the respondents in all of the income groups, another key priority of park managers should be to remove the unwanted characters, such as homeless people, drunks, drug users, gangs and thieves, regularly from parks. The work of Madge (1997) and Mitchell (1995) confirms the aforementioned.

Table 5.8 Comments and suggestions about park usage

Comments and suggestions about park usage	High-income (n = 413)	Middle-income (n = 386)	Low-income (n = 489)	All income groups (n = 1288)
Maintain parks regularly	18% (n = 74)	16% (n = 63)	15% (n = 73)	16% (n = 210)
Clean park areas daily	8% (n = 35)	7% (n = 27)	17% (n = 83)	11% (n = 145)
Check park areas daily for homeless people, drunks, drug users, gangs and thieves and remove them	9% (n = 37)	8% (n = 30)	12% (n = 58)	10% (n = 125)
Community education on park maintenance	3% (n = 12)	2% (n = 8)	7% (n = 36)	4% (n = 56)
Want larger park areas for more communal use	1% (n = 6)	2% (n = 9)	6% (n = 29)	3% (n = 44)
Multipurpose use of parks	2% (n = 8)	1% (n = 5)	3% (n = 17)	2% (n = 30)
Grass must be planted in the vicinity of the park equipment	0.4% (n = 2)	2% (n = 7)	0.2% (n = 1)	1% (n = 10)
No comments made	58% (n = 239)	61% (n = 237)	39% (n = 192)	52% (n = 668)

Note: Percentages do not total 100 due to rounding.

Although only 4% of the respondents in all income groups indicated that community education on park usage is important, their comments are noteworthy. Similar to international literature (Azuma et al. 2006; Cranz & Boland 2004; Morris 2003), the respondents in all income groups stated that community education on park usage in general will ensure more community pride in parks and encourage more respondents to visit parks more often. Community education could take the form of environmental education, which could entail guided tours through parks and community members cleaning parks themselves. For example, the respondents from Kuilsriver contribute to bettering their park environment by cleaning Drostdy Park themselves. One high-income group respondent

said, “People should learn to respect others’ freedom to come and enjoy a free time [in parks].” One middle-income group respondent indicated, “Parks can help children identify and learn in their own areas,” while one low-income group respondent feels “The community must be proud of their parks and look after it and keep it clean – parks help to improve the community and help [children] to stay off the streets.”

Continuous maintenance is also crucial to 18% and 16% of the high- and middle-income group respondents respectively, while 17% of the low-income group respondents commented that parks must be cleaned daily (Table 5.8). In the words of one high-income group respondent: “In any area, irrespective of income et cetera, open spaces are crucial and will create a safer environment, if properly managed. [Parks] can serve to educate children and give them a sense of nature and belonging.” Safety in parks are also a concern to the respondents in the three income groups, because 8%, 9% and 12% of the middle-, high- and low-income group respondents respectively want homeless people, drunks, drug users, gangs and thieves to be removed from parks daily. One middle-income group respondent stated: “We want to improve the community, because the children must play and be safe. The government must look at [our answers to the questions] and attend to [the problematic aspects we highlighted with regards to park usage].” The low-income group respondents had harsh words for the government, which indicate their frustrations with parks: “Whatever [the] government is doing for people must be monitored and secured regularly” and “I think the government needs to start from scratch, because everything that has been asked [in] this questionnaire, we do not have. We need [park] resources!” Perhaps the harshest words came from a Gugulethu respondent: “Act appropriately, or face adversity. Look around ‘white’ areas [and] you will know what is missing in black disenfranchised communities. More parks should be built in townships and [equipped] with the needed equipment for [parks]!” The aforementioned statements from a few low-income group respondents clearly indicate a class divide when it comes to general park usage in the three income groups, because the high- and middle-income group respondents did not make similar comments.

5.7 CONCLUSION

To conclude, the results in Chapter 5 show that the lower the income of the respondents, the more satisfied they are with general service delivery, possibly because their expectations of service delivery in general is lower. Parks and recreation are less important to the respondents in all income groups compared to other services. However, a higher class level (socio-economic level) translates into more satisfaction with overall park quality and park management and maintenance. The

middle- and low-income group respondents indicate average park management and maintenance in their suburbs. The location of parks creates the least problems for all income groups, whereas toilet facilities are problematic.

Despite all the reasons given, why the respondents are not satisfied with park management and maintenance, recurrent concerns were observed. The concerns can be grouped into 'soft' and 'hard' factors creating problems for the respondents in all the income groups. The persistent 'soft' apprehensions in all income groups comprise safety issues, especially with regard to homeless people, drunks, drug users, gangs and thieves; maintenance and cleanliness concerns, in the form of continued litter and vandalism. The continuous 'hard' inconveniences consist of a lack of natural vegetation and the state of play equipment and park furniture. These concerns were reflected in the facilities that the respondents would most like to develop in parks. Although class differences occur in the type of facilities the respondents in the three income groups would like to develop in parks, added safety, safer and more play equipment, park furniture and planted grass and trees are the most important facilities all income groups desire in parks. Most respondents in the three income groups also aspire to the same ideal park settings: clean, spacious, green and flat, with pretty gardens, nice scenery and shade, together with sporting facilities. To a lesser extent, safe, fenced parks with controlled free access are also important, especially to the low-income group respondents, while creating sections are more crucial to the high-income group respondents. The respondents in the three income groups made various comments and suggestions to increase park usage. The most repetitive comments in the three income groups relate to maintaining and cleaning parks, and regularly removing unwanted elements and characters (such as homeless people, drug users and gangs) from parks, so that parks can be safe environments in which children and adults can participate in recreation activities.

CHAPTER 6: CONCLUSION: PROVIDING ADEQUATE PARKS

Chapter 6 provides a summary and synthesis of the key issues discussed in Chapters 3 to 5. A model/framework of park use is also proposed (Table 6.1). The main recommendations for providing satisfactory parks throughout the City of Cape Town are highlighted for the City Parks Department. Concluding remarks emphasise the main implications of the thesis for effective park planning, delivery, management and maintenance. The limitations of the study are also discussed and subsequent suggestions are made for future research in the field of study.

6.1 SUMMARY AND SYNTHESIS OF THE MAIN FINDINGS OF PARK PROVISION AND PARK USAGE IN THE CITY OF CAPE TOWN

The main aim of the study was a class-differentiated analysis of park use, namely to determine the role that class plays on local residents' perceptions, preferences and needs regarding park usage. Three income categorisations (high, middle and low) were used as the main indicator to show class differentiation. Class distinctions influence the way in which the respondents in the three income groups use parks. The result is that different income groups have somewhat different park-usage patterns. Table 6.1 proposes a class-differentiated framework of park use. The main findings of park usage are summarised according to the role class plays in the spatial geography of parks (Chapter 3) and park usage (Chapter 4), its role in service delivery and how class determines the levels of contentment with parks (Chapter 5). Together, the aforementioned influences park usage (in other words, who uses parks, where, when, why and how) (Table 6.1).

6.1.1 Class as an indicator of the spatial geography of parks

The visibility of class differences is the most profound in the *provision/availability and proximity to parks* in the three income groups (Table 6.1). Park provision/availability is relatively good in the high- and middle-income suburbs. Not only do middle-income suburbs have most of the residents in the City of Cape Town, but they also contain the most parks. Consequently, more people have to use parks in the middle-income areas, compared to high-income suburbs that have a lower park to people ratio. The apartheid government paid less attention to the delivery of park and recreation services in black townships. Today, these imbalances in social injustice remain. Residents in the three income classes do not have equal rights to and opportunities for park usage. Townships are high-density and overpopulated low-income areas, where a much lower provision of parks prevails. Consequently, more low-income group residents have to use fewer parks.

Table 6.1 A model/framework of the main park-use findings

Class distinctions			
Spatial geography of parks (Chapter 3)	High-income	Middle-income	Low-income
Park provision and park proximity	- Good park provision and park proximity	- Areas of good and poor park provision and park proximity	- Problematic park provision and park proximity
Park usage (Chapter 4)	High-income	Middle-income	Low-income
Demographic profiles	- Do not stay in suburb for long - Smaller families (1-4 people) - Mostly white people - Speak Afrikaans and English - Majority have a car and a garden	- Stay in suburb for longer - Average families (1-6 people) - White people and coloureds - Speak Afrikaans and English - Some have a car and a garden	- Do not stay in suburb for long - Bigger families (1-7 people) - Mostly black people - Speak an African language - Majority have no car or garden
Urban national park use	- Good proximity to conservation areas - Visit the most - Require the least new parks	- Poor proximity to conservation areas - Average visitation - Require more new parks	- Poor proximity to conservation areas - Visit the least - Require more new parks
Frequency of park use and time spent in parks	- Children visit more than adults and spend more time in parks - Adults visit the most and stay the longest	- Children visit more than adults and spend more time in parks - Children and adults visit the least and stay for the shortest amount of time	- Children visit more than adults and spend more time in parks - Children visit the most and stay in parks the longest - Adults do not visit as often as children
Distances to parks	- 0-5 minutes' walk	- 0-5 minutes' walk	- 0-5 minutes' walk, but 25% takes longer than 15 minutes
Mode of transport used to visit parks	- Walk - Private transport (car)	- Walk - Private transport (car)	- Walk - Private transport (car), but 7% go by taxi
Participation in activities	- Children = active recreation - Adults = passive recreation - Children play - Adults accompany children - Other residents mostly walk their dogs	- Children = active recreation - Adults = passive recreation - Children play, but the parks lack facilities and play equipment - Adults accompany children - Other residents mostly walk their dogs	- Children = active recreation - Adults = passive recreation - Children play, but the parks lack facilities and play equipment - Adults do not accompany children to parks, they prefer socialising activities - Other residents mostly walk their dogs
Reasons for park non-use	- Safety and security - Maintenance - Lack of time	- Safety and security - Maintenance - Homeless people, drunks, drug users and gangs use parks	- Safety and security - Maintenance - Homeless people, drunks, drug users and gangs use parks - Lack of vegetation and facilities
Outdoor recreation places	- Neighbourhood parks not so important as an outdoor recreation area	- Neighbourhood parks not so important as an outdoor recreation area	- Neighbourhood parks not so important as an outdoor recreation area
Satisfaction with service delivery and parks (Chapter 5)	High-income	Middle-income	Low-income
Service delivery	- Less satisfied with service delivery, parks not important to improve	- Less satisfied with service delivery, parks not important to improve	- More satisfied with service delivery, backlog in services more profound, parks not important to improve
Satisfaction index	- Good park management and maintenance	- Average park management and maintenance	- Average park management and maintenance
Problems in parks	- Safety and security - Maintenance, litter and vandalism - Play equipment, furniture and facilities not maintained and are in poor condition	- Safety and security - Maintenance, litter and vandalism - Lack of play equipment, furniture, facilities and vegetation	- Safety and security - Maintenance, litter and vandalism - Lack of play equipment, furniture, facilities and vegetation
Providing adequate parks	- Parks must be safe, well maintained and developed - Maintain equipment, furniture, facilities and vegetation	- Parks must be safe, well maintained and developed - Provide adequate equipment, furniture, facilities and vegetation	- Parks must be safe, well maintained and developed - Provide adequate equipment, furniture, facilities and vegetation
= Park usage – who uses parks, where, when, why and how			

In addition, the large low-income population also has the lowest park area in square metres in the City of Cape Town, which results in every low-income group resident having a small park area per person (2.2 square metres). Although middle-income suburbs have the most park area in the City of Cape Town, they also have the largest population – which leads to a slightly larger park area per person (2.6 square metres). In contrast, the high-income group residents have the most park area available per person (7.1 square metres), due to a relatively large park area and less densely populated suburbs.

The two GIS park proximity analyses indicate very good proximity to a park in high-income suburbs. The majority of the high-income group residents can comfortably reach a park within 0-400 metres (or 0-5 minutes' walk). There appears to be very good park proximity in middle-income suburbs where more white people live. In contrast, the sections where proximity to a park is more problematic are located in middle-income areas where more coloureds live, which are also situated closer to low-income suburbs. Low-income suburbs consist of the most areas where park proximity is very problematic and people have to walk more than 1201 metres (or 15 minutes) to reach a park. Overall, park proximity is relatively better when only the proximity to a park is taken into consideration. However, when a constraint is placed on the capacity of a park, more respondents, especially those in low-income suburbs, cannot reach a park. Both GIS analyses are however relevant, because they indicate that all three income groups have areas of better and poorer park proximity – but that in general proximity to a park is better in high-income suburbs than in low-income areas. The implication of the aforementioned is that the government must start by improving park delivery and park proximity in low-income suburbs first, followed by middle-income and finally high-income suburbs.

6.1.2 Class as an indicator of park usage

The notion of social stratification and class differentiation also presents itself in the demographic profiles of the respondents and in general park usage. Differences in *demographic profiles* are detected in the number of years the respondents have stayed in a suburb, the number of household members, the racial construct of suburbs and language differences and having a private garden and owning a car (Table 6.1). The high- and low-income group respondents have stayed in their suburbs for a shorter period than the middle-income group respondents. The high-income group respondents have more resources (financial) to move from one suburb to another and consequently they can provide themselves and their families with quality housing opportunities and park facilities. The low-income group respondents lack the resources to do the same. However, because of the lack of

resources and services in specific suburbs, and the non-permanent and sometimes illegal nature of housing constructions of the low-income group respondents, they will move to suburbs where they have better opportunities to survive in the urban township setting. The expectation is that higher-income group individuals can afford larger families, but the results in this study indicated that income differences do not influence family size. The cultural traditions of closer kinship ties cause the black low-income group respondents to have larger families than the high- and middle-income group respondents. The racial construction and home languages in the City of Cape Town were traditionally shaped by the oppressive apartheid planning, but are maintained today by class differences (socio-economic differences) in the City of Cape Town. The higher-income group individuals are mostly white and speak Afrikaans and English. Afrikaans-speaking coloureds comprise most of the middle-income group respondents, while black people who speak African languages remain marginalised in low-income suburbs. Having a private garden and owning a car in the City of Cape Town were also affected by the apartheid legislation. Today, class differences influence whether the respondents own a car and have a house with a private garden. The high-income group respondents have more resources to afford a car and a home with a private garden. In contrast, the low-income group respondents remain 'trapped' in the ever increasing high-density overpopulated township areas, because they lack the financial resources to obtain a higher quality life, where they can afford a car and a home with a private garden.

As mentioned, the high-income group respondents' homes are located within reasonable proximity to *urban national parks* and community/neighbourhood parks (Table 6.1). Although the majority of the respondents in all income groups never visit the Table Mountain National Park, the high-income group respondents are the most likely to visit it. Class distinctions are evident in the reasons why the respondents never visit the Table Mountain National Park. The high-income group respondents have the resources to visit the Table Mountain National Park every few years. The resources include, among other things, money, special school programmes where children visit the park on educational school excursions, private transport and the respondents being able to afford the bus services of the Table Mountain National Park to go on day trips throughout Cape Town and the park. In contrast, the middle- and low-income group respondents lack the financial and transportation resources to do the same. Table 6.1 shows that the proximity to conservation/biodiversity areas, parks and a private garden decreases as income decreases. A decrease in proximity as income decreases results in a decrease in the frequency of use. Not surprisingly, the high-income group respondents want the least new parks closer to their homes, because there are enough green spaces that surround them. In contrast, the middle- and low-income group respondents want closer parks, because they do not have parks close to their homes, or the

existing parks do not have any facilities, or are too far away or lack the maintenance to create enjoyable park atmospheres. The middle- and low-income group respondents also require larger parks, because they complained about the small pocket parks in their neighbourhoods. The middle- and low-income group respondents indicated that park and recreation services are not very important to deliver compared to other more crucial services. The aforementioned could explain why more respondents in these income groups did not indicate that they want parks closer to their homes.

Differences in the *frequency* with which the respondents *visit parks* and the *time* the respondents *spend in parks* can be explained based on the notion of class (refer to Table 6.1). The children in all income groups use parks more than the adults do, probably because the adults have more responsibilities and obligations to fulfil. Equally so, the children in all income groups spend the most time in parks. The high-income group respondents have the resources (cars and money) to visit proximate parks on a regular basis. Furthermore, the high-income group respondents have enough parks that are within at least 0-10 minutes' walk from their homes. The consequence of the two aforementioned reasons is that the high-income group adults do not only go to parks the most, but they also spend the most time there of all the adult groups. Parks function as a recreation space for the low-income group children who use it the most and spend the longest time there, because there are a lack of alternative play spaces and recreation opportunities, such as private gardens, at their homes in high-density overpopulated townships. In contrast, the middle-income group children and adults and the low-income group adults use parks the least. The middle-income group respondents also stay in parks for the shortest time. The middle-income group respondents may still be proximate to other forms of recreation, whereas the low-income group adults are most likely not interested in visiting parks because of the unpleasant conditions in parks.

Class distinctions do not significantly influence the *distances* that the respondents travel *to parks*, because the majority of the respondents in all three income groups take 0-5 minutes to reach parks (Table 6.1). Despite the aforementioned, distances to parks are in general more problematic for almost one-third of the low-income group respondents who take longer than 15 minutes to reach parks. Distance decay is evident for the majority of the respondents in all income groups, whereby the frequency of use decreases as distances to parks increase. However, the middle- and especially the low-income group respondents are the most likely to travel further to parks, because no closer alternatives exist. This finding supports the GIS park proximity analyses. Proximity to a park is more problematic in low-income suburbs, followed by middle-income areas and finally high-income suburbs. Not having a private garden does not increase the frequency of park use of the

high- and low-income group adults and the middle-income group respondents. In contrast, the high- and low-income group children visit parks frequently if they do not have a private garden. Walking is the most preferred *mode of transport* that the children and adults in all income groups use to get to parks. Although more low-income group respondents use a taxi, that charge a flat-rate, to visit parks, the use of public transportation does not significantly increase with a decrease in income.

The respondents in all income groups participate in *active and passive recreation* during different life stages. Table 6.1 indicates that the children in all income groups mostly engage in active activities, while the adults prefer passive recreation. The children in all income groups enjoy playing in parks, but the way in which they play differs between the three income classes. There is a disproportioned distribution of park facilities – more specifically play equipment and park furniture – in high-, middle- and low-income suburbs. Parks in the high-income areas receive more financial resources (most likely from the taxes that they pay to the government) to provide proper and functional variety in play equipment. Unfortunately, the apartheid backlog in park facilities remain – with very little or no play equipment and park furniture being provided in especially low-income suburbs. The result is that the middle- and low-income group children more often have to improvise their own playing environment by playing sports, imaginative games or with their own toys in parks. Adults in the high- and middle-income groups are more concerned about their children's safety in parks, because one of their most frequent activities for which they visit parks is to accompany their children. In contrast, the low-income group adults do not always accompany their children to parks. Class distinctions are also visible in activities families enjoy in parks. The low-income group adults participate in more socially orientated passive activities in parks, which they are not able to accomplish at their homes in dense, overpopulated townships. In contrast, the high-income group children and adults engage in activities that are more expensive like playing golf, quad biking and flying radio-controlled helicopters. Walking the dog is the most frequent activity in which other residents partake in parks in all three income groups.

Fear resonates as the number one *reason why* the majority of the respondents *do not visit parks*, regardless of the social class they belong to (refer to Table 6.1). The fear is expressed through safety and security concerns and a lack of maintenance, which create an unpleasant atmosphere in parks. However, class determines the degree to which the respondents in the three income groups experience other reasons for park non-use. The high-income group respondents have the resources to choose from various activities/obligations they can/have to do in a day. When prioritising their daily activities/obligations, they often have a lack of time to fit all their desired activities/obligations, such as park usage, into a limited amount of time. In contrast, the middle-

income group respondents experience conflicting interests in how different individuals in their suburbs use parks. Children and adults want to use parks in middle-income areas for the ‘more normal activities’, but the continued presence of homeless people, drunks, drug users, and gangs is problematic. While homeless people, drunks, drug users and gangs are also problematic in low-income suburbs, the major concern for the low-income group respondents who do not use parks is of a structural nature. Low-income suburbs’ parks are barren landscapes without vegetation and facilities. The low-income group respondents often feel they do not have the bargaining power or financial resources to contribute to acquiring more and better-looking parks. The result is that the low-income group respondents use parks less.

Outdoor recreation options are not influenced by class differences, as most children and adults in all income groups perform recreation activities in similar areas (refer to Table 6.1). The home, school and sports grounds are the most preferred outdoor recreation places for the respondents in all income groups. The children and adults in all income groups do not regard parks as such a popular outdoor area in which to perform recreation activities. The result confirms findings that park and recreation services are not crucial to improve. However, the definition of parks creates confusion, as open land surrounding the home is also considered as park-like areas. The confusion is because most parks in middle- and low-income suburbs lack vegetation and facilities and function both as parks and as open areas.

6.1.3 Class as an indicator of service delivery and contentment with parks

Socio-economic differences can also be used to explain the respondents’ perceptions of the *service delivery of parks* (Table 6.1). Although the low-income group respondents are more satisfied with general service delivery since the last local government elections, they still indicated that the most basic services (housing, clinics and health care and safety) require the most improvement. The aforementioned is a sign of the backlog in essential service delivery, especially among the low-income group respondents. The high- and middle-income group respondents are less satisfied with general service delivery and indicate somewhat different important services to improve, including safety, clinics and health care, and roads and sidewalks, among other things. According to the respondents in all three income groups, the delivery of park and recreation services have stayed the same since the last local government elections. Interestingly though, the respondents in all income groups do not see parks and recreation as such an important service to improve. Maslow’s hierarchy of needs indicates that lower-order needs have to be fulfilled first before higher-order needs can be

fulfilled. Parks and recreation are higher up in the pyramid, which explains why other services are simply more important to improve first.

Only minor differences in the respondents' levels of satisfaction with parks are detected between the three income classes. Contradictory to the results of the classes' levels of satisfaction with general service delivery, the high-income group respondents experience better management and maintenance in their parks than the middle- and low-income group respondents (Table 6.1). The post-apartheid government tries to improve and uphold the service quality of the various services in high-income suburbs, whereas the focus in middle- and low-income suburbs is on eradicating backlogs of more essential services first (housing and clinics and health care) before considering other services. Although the three major concerns in park usage (safety, lack of maintenance and persistent litter and vandalism) are the same across all three income classes, structural problem differences are evident between the three class distinctions. The high-income group respondents complained about the poor condition of existing park facilities, play equipment and park furniture. On the other hand, the middle- and especially the low-income group respondents expressed concerns about the lack of facilities and vegetation in parks – making parks empty, barren and dull pieces of open land, which do not invite regular, comfortable and pleasant park usage. The middle- and low-income group respondents appear to be in an inferior position with regards to park services and facilities, than the high-income group respondents. The implication of the aforementioned is that the government should start by providing the necessary park services and facilities in the middle- and low-income groups first, before improving the problems with/in parks in the high-income group that already have existing park services and facilities.

The problems experienced by the three income classes in terms of park usage translate into the facilities they require in parks, creating 'ideal park settings' and the suggestions they make to increase park usage (refer to Table 6.1). Safety, mostly in the form of removing unwanted characters and elements from parks, is the main facility the majority of the respondents want to develop in parks. Furthermore, the majority of the respondents in all income groups want their ideal parks to be beautiful, well maintained and regularly cleaned and to allow for different activities to occur simultaneously. The middle- and low-income group respondents specifically want to integrate sports facilities into park facilities. The high-income group respondents demand better quality and more variety in play equipment, park furniture and vegetation. In contrast, the middle- and especially the low-income group respondents ask for the most basic play equipment, park furniture and grass to be planted in parks. Park size is somewhat of an issue, especially for the low-income group respondents, who complained about pocket parks only filling in gaps between shacks and not

being big enough to allow participation in their desired activities. These two classes are however well aware of the overall deprived and disadvantaged park management and maintenance in their parks, because they actually desire and deserve similar standards in quality park delivery as those of the high-income group respondents. Community education would not only enhance the knowledge of the community with regards to park usage in general, but also improve their ability to bargain for better park delivery.

6.2 RECOMMENDATIONS FOR BETTER PARK USAGE

From the literature review (Chapter 2), broad themes are evident that constitute requirements that governments have to focus on to increase park usage. The requirements need to be considered as a collective unit, because if one is not provided, it might cause people to use parks less. Table 6.2 consists of seven main recommendations: spatial, governmental and economic, environmental, management, aesthetic, social and safety and security. Spatial recommendations indicate that parks must be accessible and proximate to ensure that people use parks (Azuma et al. 2006; Furuseth & Altman 1991; Pasaogullari & Doratli 2004). Governmental and economic recommendations point to the financial support required to plan, deliver, manage and maintain parks (International Federation of Parks and Recreation Administration 2006). Environmental sustainability plays a key role in environmental recommendations. Humans should keep the disturbances to nature as minimal as possible (Shi et al. 2006). Recommendations for better park management include providing well-maintained and high-quality parks with a variety of activities and facilities that will serve all in society (Pasaogullari & Doratli 2004).

Table 6.2 Summary of literature-based recommendations for better park usage

Recommendations for better park usage	Description
Spatial recommendations	→ Parks must be accessible and proximate to be used often
Governmental and economic recommendations	→ Adequate park planning, delivery, management and maintenance strategies must be implemented
Environmental recommendations	→ Parks should enhance environmental sustainability
Management recommendations	→ Parks must be effectively managed to serve all in society
Aesthetic recommendations	→ Parks must be physically appealing
Social recommendations	→ Parks must be areas where social interaction can occur
Safety and security recommendations	→ Parks must be safe and secure areas in which to perform recreation activities

Sources: ¹⁸

¹⁸ Azuma et al. (2006); Erkip (1997); Furuseth & Altman (1991); Gobster (2002); International Federation of Parks and Recreation Administration (2006); Jim & Chen (2006); Pasaogullari & Doratli (2004); Shi et al. (2006); Yildaz, Zengin & Yildiz (2007).

Aesthetic recommendations are concerned with the physical appearance of parks. Parks must be physically attractive to allow more people to visit them (Pasaogullari & Doratli 2004). Social recommendations show that parks are places of social interactions. Parks must have a comfortable, and good-quality image to ensure usage (Pasaogullari & Doratli 2004). For citizens to feel comfortable, they must feel that parks are places where safe, social interaction can take place. Comfortable parks will allow citizens to feel a sense of belonging and trust (Yilmaz, Zengin & Yildiz 2007). Community participation, where the community's needs, perceptions and preferences are taken into consideration, is also of key importance in allowing citizens to voice their opinions about park usage (Jim & Chen 2006). Citizens must feel safe in parks. Bad elements, such as homeless people, vagrants, drunks, drug users and gangs must be removed from parks (Burgess, Harrison & Limb 1988; Gobster 2002). Appendix F gives a detailed description of how the seven recommendations are applied in the literature to improve park usage.

From Chapters 3 to 5 and the synthesis of park usage (Section 6.1), certain issues of park usage in the study can be deducted that require specific attention in parks in the City of Cape Town. The aforementioned forms part of the recommendations made by the respondents in the three income groups to improve park usage. Although some differences occur, the themes in Appendix F were used to group the recommendations into categories. The categories include spatial, park development and delivery (which is equal to the governmental and economic recommendations in Appendix F), management, aesthetic, community participation (which constitutes the social recommendations in Appendix F), and safety recommendations. The respondents in the City of Cape Town did not make environmental recommendations to improve park usage. The chapter(s) in which a specific recommendation is discussed is (are) indicated in italics. The specific recommendations in each category are as follows:

- *Spatial recommendations* are concerned with three issues: the location (availability) of parks, proximity to parks and the sizes of parks. Parks must be located at the correct spatial locations in order for everyone to reach parks within at least 15 minutes' walk or 1200 metres. Parks should also have appropriate sizes to allow the respondents to participate in various activities. Proximity to parks is especially problematic in low-income suburbs, where the community also struggles with transportation problems to reach parks and lacks the financial resources to travel further to existing parks. The following can be done to achieve the spatial recommendations:
 - Enhance and increase public transportation options (*Chapter 4*)

- Increase park proximity so that the respondents can reach parks within at least 15 minutes' walk, or 1200 metres, especially in middle- and low-income suburbs (*Chapters 3 and 4*)
 - Increase proximity to conservation/biodiversity areas, especially for middle-income areas and to a lesser extent for low-income suburbs (The low-income group respondents use conservation/biodiversity areas less because they do not have money to pay entrance fees) (*Chapter 4*)
 - Increase the sizes of parks (create larger parks) especially in low-income suburbs (The respondents do not want pocket parks) (*Chapters 3, 4 and 5*)
- In order for the local government to *develop and deliver effective parks*, it firstly has to focus on planning and designing parks correctly. The form of urban design determines park usage. Compact city design prompts more park usage, because the respondents have less or no private garden space. The respondents will compensate for the loss in private recreation space by going to parks in their neighbourhoods that are proximate, well maintained and secure. Despite the fact that the respondents in all income groups do not see park and recreation services as such an important service to deliver, the delivery of park and recreation services must be seen as equally important to other services, such as clinics and health care and housing. If it is not the case and the need for services that are more crucial have been fulfilled, there will be no spaces left to develop adequate parks that the respondents in the City of Cape Town desire. Park development and delivery recommendations can be accomplished by doing the following:
- Build new parks in low-income suburbs, because existing parks are too small and not well maintained (*Chapters 4 and 5*)
 - Compact city/urban design will translate into increased park usage (*Chapter 4*)
 - Do not let the importance of the delivery, management and maintenance of urban parks be overshadowed by other services, such as clinics and health care, housing and general safety and security, which may appear more crucial to develop and enhance (Providing safe and maintained environments in the form of parks is the right of all citizens in the City of Cape Town, as many of them do not have private gardens and they perform recreation activities in the streets) (*Chapter 5*)
 - When new towns/cities are planned, parks should be planned together with housing, retail and industrial developments (This is especially necessary in low-income suburbs, where very little space is left for parks). Furthermore, the front of houses should face parks to improve security through neighbours' visibility (*Chapter 5*)

- A well-designed *park-management framework* will ensure that all citizens in the City of Cape Town are proximate to high-quality parks that are properly managed and regularly maintained. Proper management and regular maintenance is one of the most important deterrents to regular and pleasant park usage and can be realised through:
 - Adding rubbish bins without holes at the bottom (*Chapter 5*)
 - Building park furniture with cement so that it is not as easily vandalised as is the case with wooden structures (*Chapter 5*)
 - Dumping of litter should be punished (*Chapter 5*)
 - Employing unemployed individuals as park personnel to maintain and clean parks daily. This initiative will also enhance economic wellbeing in suburbs (*Chapter 5*)
 - Implementing dog rules in parks (*Chapter 5*) (One or all of the following rules must be included):
 - Dogs should always be on a leash
 - Punish dog owners who do not pick up dog faeces by giving them a fine
 - Remove dogs from parks
 - Maintaining and cleaning parks regularly (*Chapters 4 and 5*)
 - Maintaining toilet facilities regularly and removing homeless people who sleep there (*Chapter 5*)
 - Replacing vandalised and broken play equipment and park furniture (*Chapters 4 and 5*)

- *Aesthetic* suggestions to improve park usage concentrate on creating ideal park appearances and appropriate park surfaces. Parks must be aesthetically pleasing to look at and spend time there. Parks must also contain a variety of facilities, equipment and furniture for a variety of different users. Vegetation in parks has to be properly managed, by providing vegetation (grass and trees) in parks that lack it (especially parks in low-income areas) and maintaining existing vegetation, such as mowing grass regularly. Aesthetic recommendations can be achieved in the following ways:
 - Create disabled-friendly parks, with play equipment for disabled children, hard pathways for wheelchair users and more seats (*Chapters 4 and 5*)
 - Create sections in parks to enhance multiple uses (*Chapter 5*), such as the following:
 - A sports area with facilities
 - An area for children's play equipment
 - An area for more challenging equipment and furniture for teenagers

- An area in which to observe wildlife/nature/water
 - An area where adults and the elderly can relax
 - Community notice boards with rules of park behaviour
 - Walkways through parks for walking/jogging/cycling/skateboarding/rollerblading/biking
 - Parking facilities must be provided (*Chapter 5*)
 - Park surface areas must be appropriate (*Chapter 5*), entailing the following:
 - Fell trees regularly so that branches do not overgrow
 - Grass must be mowed regularly, but do not mow over beautiful gardens
 - Grass must be planted in parks so that parks are not just open pieces of sand
 - Grass must be planted in the vicinity of the park equipment so that children do not hurt themselves
 - Plant trees for shade
 - Weeds, thorns and litter in grass, such as dog faeces and glass, must be removed
 - Parks must be clean, spacious, green, flat, beautiful and aesthetically pleasing (*Chapter 5*)
 - Provide the most basic play equipment / park furniture for all ages in parks in low- and to a lesser extent in middle-income suburbs (*Chapters 4 and 5*)
 - There should be more variety in play equipment and park furniture in parks for all income groups and it must be age- and size-appropriate (*Chapters 4 and 5*)
- *Community participation* is a crucial element in increasing park usage. The respondents in the three income groups want to participate in improving park usage. The aforementioned is evident in their comments of appreciation for the study. One high-income group respondent stated: “Thank you for the research. I hope it has a positive outcome,” while another wrote “Please, do not get rid of [parks], we love open spaces and do not want to live in a concrete jungle.” One low-income group respondent indicated, “I think this questionnaire will help whoever is dealing with this. Please make use of our comments.” Community participation recommendations entail the following:
- Community education on park environments and regular park maintenance should occur. Education could occur via schools, churches, guided tours, or through competitions where children design their ideal parks (*Chapter 5*)
 - Community participation is crucial to create successful park usage (*Chapter 5*). Community participation can include the following:

- Community management of park environments by volunteer neighbourhood watches and forming neighbourhood park-management teams
 - Community participation in park planning and design by giving input into what their ideal parks look like
 - Maintenance by volunteers who organise the regular cleaning of parks
- *Safety and security* is, together with the management recommendations, the most important aspect the government has to look at to increase and improve park usage. The respondents in all income groups do not use parks if they are not secure and if the ‘unwanted characters and elements’ are not removed. A statement from one middle-income group respondent summarises the concerns of the respondents in all income groups about safety and security: “There should be more security in the parks and [unwanted characters and elements] should not be tolerated, as [parks] are meant for family and children.” The following can be done to achieve the safety and security recommendations:
- Create safe park environments (*Chapters 4 and 5*), by adding the following:
 - Fences with gates to control free access, appropriate lighting, park personnel, security guards, safety cameras, speed bumps in busy streets surrounding parks and/or a bridge so that children can safely cross the road (Preferably parks should not be developed near busy streets)
 - Remove unwanted park elements and antisocial characters (homeless people, vagrants, vandals, drunks, drug users, gangsters, thieves, alcohol abusers and teenagers who drink, smoke and use drugs) from parks on a regular basis (*Chapters 4 and 5*)

6.3 CONCLUSION

To conclude, overall, park usage in the City of Cape Town does not differ significantly from the international and South African literature. The class-differentiated analysis of this study does however indicate that park usage is also specific to a particular income group in the City of Cape Town. The study’s class-differentiated analysis of park usage in the City of Cape Town can be used as a framework for the government to design, develop, deliver and manage parks effectively for the three income groups. The respondents in the three income groups have various reasons for dissatisfaction with park services. Park planning has to be class-specific, because different income classes have different park-usage needs. Despite the aforementioned, the government may not be

able to satisfy the park perceptions and preferences of all the respondents in the three income groups. The park issues that are mentioned repetitively by the majority of the respondents, regardless of the class they belong to, are dissatisfaction with park safety and security, and park management, maintenance, vegetation and facility concerns. Generally, there is not a shortage of parks in the suburbs of all the income groups, but the respondents want parks that are *secure, well maintained and developed with adequate vegetation and facilities for all ages*, which they feel may encourage the community to use parks more often. The aforementioned are the core issues the City Parks Department should focus on to increase park usage for the majority of the respondents in all three income classes.

6.4 LIMITATIONS OF THE STUDY

Limitations were encountered with the following: using questionnaires as research method, data sampling, data design, questionnaire distribution and collection and data processing and data analysis.

The *limitations of using a questionnaire* as a means of conducting research include the following aspects. Firstly, questionnaire research normally yields a very low response rate. To counteract the low response rate, 345 additional questionnaires were sent out to the three income groups to ensure that the target of 1155 was reached. In doing so, the low questionnaire response rate was successfully counteracted by receiving 1288 questionnaires back in total. Secondly, despite phrasing the questions in the simplest manner and pilot-testing the questionnaires, some respondents still misinterpreted some of the questions. An example is that respondents who never use parks were asked to only answer the questionnaire up to question C2(1). However, during the analysis phase of the study, it became apparent that the respondents who never use parks continued answering the remaining sections in the questionnaire. Two main reasons why the aforementioned occurred is that the respondents did not read and understand the questionnaire correctly, or that the respondents who only visit parks infrequently throughout the year consider themselves to be park non-users, but also believe that they visit parks enough times during a year to comment on other sections in the questionnaire. Consequently, the results were adapted to ensure that the category of respondents who never visit parks also includes the respondents who only visit parks irregularly during the year. The respondents also misinterpreted questions E2 and E3 as the same question. To solve the problem of misinterpretation, the responses in both questions E2 and E3 were first read, after which themes were created to fit with the particular questions. Lastly, the responses were coded according to the themes.

Thirdly, the returned questionnaires contained portions of missing information, where the respondents simply did not answer the questions. However, the missing information did not influence the findings as viable results were obtained from the different analyses. An interview questionnaire survey would allow the researcher to eliminate the problems encountered with a mail/courier survey, if the total number of questionnaires that has to be received back is not as many. The researcher could ensure that the target is reached for the number of questionnaires that has to be completed. In addition, the researcher would also be able to complete the questionnaire him- or herself and would be present to eliminate any ambiguities in the questions. This would ensure that the respondents answer all the questions correctly. Furthermore, the researcher can prompt respondents to give detailed explanations to their answers and ask more questions if issues emerge during the completion of the questionnaire. Additional interviews could be conducted with homeless people, vagrants and vandals that do not use parks for the more accepted activities.

The main problem that occurred during *data sampling* was convincing schools to participate in distributing and collecting questionnaires to learners' parents. People have a natural resistance against a researcher that wants to gather personal information. Schools had to be convinced that by participating in the research, they would advance community empowerment by providing citizens with an opportunity to provide input into their park preferences. The problem with using schools to distribute questionnaires to the learners' parents is that responses about park usage are limited in scope. The opinions of the respondents about park usage were only tested for themselves and their children. For example, no examination was done of people who do not have any children, the elderly or homeless people who use parks for different reasons. Despite the aforementioned, schools were chosen as places to distribute and collect questionnaires, because according to international literature; children are the main park users. Furthermore, distributing and collecting questionnaires from a few central places, such as schools, that have a slight advantage in authority over children, was seen as a more viable option in terms of administration, finances and the time it would take to administer such a process.

The problem of relying on other people also represented itself in the *data-design phase* of the study. The Centre for Teaching and Learning (CTL) made mistakes in their redesign of the IsiXhosa questionnaires for scanning purposes and printed it without the final consent. The mistakes included spelling errors and that the 'play on play equipment' and 'toilet facilities' were left out in section E, while other options were repeated. To solve the mistakes made by the CTL in the redesign of the IsiXhosa questionnaire, apology letters were printed for each IsiXhosa questionnaire in which the mistakes were corrected. In the case of the missing options in section E, it was coded as no

responses and only the Afrikaans and English questionnaires were used. To solve the repeated options, the answers were coded only once.

Questionnaire distribution and collection also proved to be challenging. The courier service employed did not deliver the questionnaires on the dates that were predetermined. Several phone calls were made to them to explain the inconvenience they created, because the deadlines had to be postponed. The schools that received the questionnaires late thought they were not allowed to participate in the research anymore. Several phone calls were made to apologise for the inconvenience and to postpone the deadlines. Two schools also withdrew from the research after several attempts were made to regain their interest. In general, schools experienced problems with returning the questionnaires by the scheduled dates, while some schools had very low response rates. In an attempt to get as many questionnaires back as possible, the deadline of each school was postponed according to the return rate of the particular school. Postponing the deadlines proved to be a success, because more questionnaires were received back in each income group than the total that was needed. The couriers also delayed the process of collecting the questionnaires. Although the last questionnaires were received back much later than was planned, staying in constant contact with the couriers ensured that they delivered all the courier bags.

Several problems were also encountered during the *data-processing and data-analysis phases* of the research. The CTL made mistakes in their design of a database to which the closed-ended questionnaire answers were scanned. Due to the mistakes that were made in the design of the database, problems occurred during the scanning process. The scanner was unable to pick up all the closed-ended answers and required manual assistance to enter the data correctly. The CTL only recognised the error after the answers were already scanned and verified. The CTL corrected the design of the database and rescanned the problematic questionnaires to create the correct codes for the answers.

Furthermore, it is sometimes thought that the technical way of doing something (in other words using a computer and scanning technology) would be a quicker and easier method of achieving the desired outcome. However, the study proved that what appears to be a longer and more difficult route (in this case manually coding each questionnaire into a self-designed database), can sometimes have fewer problems than that of technical machinery. In general, the limitations were solved by continuously controlling the human influence on geographical research, be it through attempting the research steps through different means, always having an additional plan if the first option failed, postponing deadlines, or repeatedly phoning the responsible party.

6.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations for future research include the following three options.

An analysis of park usage can be conducted to include people with more diverse demographic profiles and backgrounds. Examples are the elderly, disabled people, single people, couples without children, homeless people, vagrants and vandals who use parks for different reasons. To achieve the aforementioned, questionnaires must be administered from different places with authority, such as schools, crèches, churches, old-age homes, community centres, local non-governmental organisations (NGOs) and parks.

Research on community/neighbourhood park usage can be integrated into research on the broader open-space system. Expanding the research to include all types of open space would allow researchers to see how different types of open space fit into the broader character of the city. Furthermore, it will allow researchers to determine the function and value of open space not only for people who live in a city, but also for the city itself – an example being how open space can function as a greenway transportation system.

Research can be conducted to determine the challenges and solutions of designing and developing parks to encourage interclass park usage in desegregated residential areas. As part of the aforementioned, research can also determine methods by which parks can foster social interaction between diverse residents in different classes in desegregated residential areas.

(32 988 words)

7 REFERENCES

- Alves S, Aspinall PA, Ward Thompson C, Sugiyama T, Brice R & Vickers A 2008. Preferences of older people for environmental attributes of local parks: The use of choice-based conjoint analysis. *Facilities* 26, 11/12: 433-453.
- Anderson ML & Taylor HF 2004. *Sociology: Understanding a diverse society*. 3rd ed. Belmont: Thomson Wadsworth.
- Azuma AM, Gottlieb R, Vallianatos M, Gudmundson J, Shaffer A & Dreier P 2006. *Connecting the parks to the community and the community to the parks: A community, economic and environmental benefit assessment of the Los Angeles state historic park (Cornfield) and Rio De Los Angeles state park (Taylor Yard)*. Los Angeles: Occidental College Urban & Environmental Policy Institute.
- Barton H, Grant M & Cruise R 2003. *Shaping neighbourhoods: A guide for health, sustainability and vitality*. London: Spon Press.
- Bond P 2000. *Cities of gold: Essays on South Africa's new urban crisis: Townships of coal*. Trenton: Africa World Press.
- Bond P 2002. *Local economic development debates in South Africa*. (Occasional Papers Series Number 6). Johannesburg: Municipal Services Project.
- Booyesen S 2007. With the ballot and the brick: The politics of attaining service delivery. *Progress in Development Studies* 7, 1: 21-32.
- Bosman P 2009. 'Township TV', Boston en parke in kollig. *Tygerburger* 18 November: 5.
- Briffett C, Sodhi N, Yuen B & Kong L 2004. *Green corridors and the quality of urban life in Singapore*. Proceedings of the 4th International Urban Wildlife Symposium held in 2004. Singapore: s.n.
- Burger R 2005. What we have learnt from post-1994 innovations in pro-poor service delivery in South Africa: A case study-based analysis. *Development Southern Africa* 22, 4: 483-500.
- Burgess J, Harrison CM & Limb M 1988. People, parks and the urban green: A study of popular meanings and values for open spaces in the city. *Urban Studies* 25, 6: 455-473.
- Butler-Adam JF & Franke AF 1986. Recreation and social need: Principles and an illustration: The case of people's parks. *South African Journal for Research in Sport, Physical Education and Recreation* 9, 1: 71-81.
- Byrne J & Wolch J 2009. Nature, race, and parks: Past research and future directions for geographic research. *Progress in Human Geography* 33: 1-23.
- Calvert P 1982. *The concept of class: An historical introduction*. London: Hutchinson.

- Chiesura A 2004. The role of urban parks for the sustainable city. *Landscape and Urban Planning* 68, 1: 129-138.
- City News 2009. Disabled children get a place to play. 23: 6.
- City of Cape Town 2003. *CMOSS strategy 2000-2005: Discussion document: Cape Metropolitan Open Space System Strategy for the City of Cape Town: 1st Draft*. Cape Town: City of Cape Town.
- City of Cape Town 2005. *City parks development policies*. Cape Town: City of Cape Town.
- City of Cape Town 2006. *Cape Town 2030: An argument for the long-term spatial development of Cape Town: Draft document*. Cape Town: City of Cape Town.
- City of Cape Town 2006/7. *City of Cape Town's Integrated Development Plan (IDP): 2002/3-2006/7*. Cape Town: City of Cape Town.
- City of Cape Town 2007/8. *City of Cape Town: 5 Year plan for Cape Town: Integrated Development Plan (IDP): 2007/8 - 2011/12: 2008/09 Review*. Cape Town: City of Cape Town.
- City of Cape Town 2009a. *City of Cape Town: Draft public parks by-law, 2009*. Cape Town: City of Cape Town.
- City of Cape Town 2009b. *Shapefiles containing information on the current availability of community/neighbourhood parks in the City of Cape Town*. Cape Town: City Parks Department.
- City of Cape Town City Planner's Department 1997. *Draft: Guidelines for local public outdoor space provision: Project report*. Cape Town: City of Cape Town.
- City of Cape Town Engineer's Department 1982. *Greening the City: Open space and recreation plan for Cape Town*. Cape Town: City of Cape Town Engineer's Department.
- Comber A, Brunsdon C & Green E 2008. Using GIS-based network analysis to determine urban green space accessibility for different ethnic and religious groups. *Landscape and Urban Planning* 86, 1: 103-114.
- Cranz G & Boland M 2004. Defining the sustainable park: A fifth model for urban parks. *Landscape Journal* 23, 2-04: 102-120.
- Crosby J & Rose H 2008. Parks and recreation: The value proposition. *Parks & Recreation* 43, 10: 63-67.
- CSIR (Council for Scientific and Industrial Research) Building and Construction Technology 2000. *Guideline for human settlement planning and design: Volume 1*. (Report No. Bou/E2001). Pretoria: CSIR Building and Construction Technology.

- CSIR (Council for Scientific and Industrial Research) 2009. City of Cape Town: Accessibility mapping for community social services: Community parks. (Interim Report). Stellenbosch: CSIR.
- Del Saz Salazar S & Garcia Menéndez L 2007. Estimating the non-market benefits of an urban park: Does proximity matter? *Land Use Policy* 24, 1: 296-305.
- Die Burger* 2009. Shoprite help PlayPump om speel-speel lewens te verbeter. 3 September: 10.
- Donaldson SE 2009. *Table Mountain National Park visitor and user survey: December 2007 to November 2008: Report B*. Cape Town: Sanparks.
- Dunnett N, Swanwick C & Woolley H 2002. *Improving urban parks, play areas and green spaces*. London: Department for Transport, Local Government and the Regions.
- Durban Municipality Environmental Branch Development and Planning Service Unit 1999. *D'MOSS framework plan*. Durban: Durban Municipality Environmental Branch Development and Planning Service Unit.
- Erkip FB 1997. The distribution of urban public services: The case of parks and recreational services in Ankara. *Cities* 14, 6: 353-361.
- Finney N & Rishbeth C 2006. Engaging with marginalised groups in public open space research: The potential of collaboration and combined methods. *Planning Theory & Practice* 7, 1: 27-46.
- Furuseth OJ & Altman RE 1991. Who's on the greenway: Socioeconomic, demographic and locational characteristics of greenway users. *Managing Leisure* 15, 3: 329-336.
- Gedikli R & Ozbilen A 2004. A mathematical model to determine unit area size per person needed in a neighbourhood park: A case study in Trabzon city (Turkey). *Building and Environment* 39: 1365-1378.
- Geoffrey C, Godbey GC, Caldwell LL, Floyed M & Payne LL 2005. Contributions of leisure studies and recreation and park management research to the active living agenda. *American Journal of Preventative Medicine* 28, 2S2: 150-157.
- Giles-Corti B, Broomhall MH, Knuiiman M, Collins C, Douglas K, Ng K, Lange A & Donovan RJ 2005. Increasing walking: How important is distance to attractiveness and size of public open space? *American Journal of Preventative Medicine* 28, 2S2: 169-176.
- Gobster PH 2002. Managing urban parks for a racially and ethnically diverse clientele. *Leisure Sciences* 24, 2: 143-159.
- Govender S 2009. Bringing colour into playground. *Sunday Times* 15 November: 9.
- Green CA & Argue TC 2007. *Draft: Schedule of standards and guidelines for the spatial provision and development of social facilities, public institutions and public open space in Cape Town*. (Report No. CSIR/BE/PSS/ER/2007/0032/B). Stellenbosch: CSIR.

- Hague A 2001. GIS, public service and the issue of democratic governance. *Public Administration Review* 61, 3: 259-264.
- Hansen KM 2006. Different places for different faces: Optimising the beneficial outcomes of Christchurch parks. Master's thesis. Christchurch: Lincoln University.
- Hansen M 2009a. Exciting parks plan: Boston eye-sores to get a new look. *Tygerburger* 15 April: 1.
- Hansen M 2009b. Forest a hive of life. *Tygerburger* 12 August: 1.
- Hansen M 2009c. Hulp nodig om parke reg te kry. *Tygerburger* 7 Oktober: 3.
- Hardy S 1980. Parks for the people: Reforming the Boston park system, 1870-1915. *Journal of Sport History* 7, 3: 5-24.
- Harnik P & Simms J 2004. Parks: How far is too far? [online]. s.l.: Planning Magazine. Available from: http://www.tpl.org/content_documents/cityparks_Planning_mag_article12_2004.pdf [Accessed 21 November 2008].
- Harrison P, Todes A & Watson V 2008. *Planning and transformation: Learning from the post-apartheid experience*. Oxford: Routledge.
- Harvey D 1973. *Social justice and the city*. London: Arnold Press.
- Hattingh PS 1979. *Homeland problems and solutions: A geographic look at the realities*. Pietersburg: University of the North.
- Henderson KA, Neff LJ, Sharpe PA, Greaney ML, Royce SW & Ainsworth BE 2001. It takes a village to promote physical activity: The potential for public park and recreation departments. *Journal of Park and Recreation Administration* 19, 1: 23-41.
- Hernandez-Bonilla M 2008. Contested public space development: The case of low-income neighbourhoods in Xalapa, Mexico. *Landscape Research* 33, 4: 389-406.
- Hillsdon M, Panter J, Foster C & Jones A 2006. The relationship between access and quality of urban green space with population physical activity. *Public Health* 120, 12: 1127-1132.
- Ho C, Sasidharan V, Elemendorf W, Willits FK, Graefe A & Godbey G 2005. Gender and ethnic variations in urban park preferences, visitation and perceived benefits. *Journal of Leisure Research* 37, 3: 281-306.
- Hugo ML 1973. Die behoefte van die bantoebevolking aan buiteligontspanning tot die jaar 2000 en die potensiaal van die tuislande om daaraan te voldoen. Doctoral dissertation. Potchefstroom: Potchefstroom University of Christian Higher Education.
- Iamtrakul P 2005. Development of a quantification framework to assess the interaction of recreational behaviour and preference of park users. Doctoral dissertation. Japan: Saga University, Department of Engineering Systems and Technology.

- International Federation of Parks and Recreation Administration 2006. *Ifpra World: Asia Congress 2008: Making connections*. Christchurch: International Federation of Parks and Recreation Administration.
- Jaglin S 2008. Differentiating networked services in Cape Town: Echoes of splintering urbanism. *Geoforum* 39: 1897-1906.
- Jansen van Vuuren V 2005. Recreational public open spaces in Southern Helderberg. Honours research report. Stellenbosch: Stellenbosch University, Department of Geography and Environmental Studies.
- Jim CY & Chen WY 2006. Profile: Perception and attitude of residents toward urban green spaces in Guangzhou China. *Environmental Management* 38, 3: 338-349.
- Johannesburg City Parks 2009. Johannesburg City Parks [online]. Johannesburg: Johannesburg City Parks. Available from: <http://www.jhbcityparks.com/> [Accessed 18 February 2009].
- Jones R 2002. Enticement: The role of community involvement in the management of urban parks. *Managing Leisure* 7, 1: 18-32.
- Kaczynski AT, Potwarka LR, Smale BJA & Havitz ME 2009. Association of parkland proximity with neighbourhood and park-based physical activity: Variations by gender and age. *Leisure Sciences* 31, 2: 174-191.
- Kang B 2006. Effects of open spaces on the interpersonal level of resident social capital: A comparative case study of urban neighbourhoods in Guangzhou, China. Doctoral dissertation. Texas: Texas A&M University, Department of Philosophy.
- Kies CW 1982. Problems relating to the use of leisure in Soweto: A preliminary survey. Unpublished report. Pretoria: Human Sciences Research Council.
- Koomen E, Dekkers J, Koetse M, Rietveld P & Schoten H 2005. Valuation of metropolitan open space: Presenting the research framework. Paper delivered at the 45th congress of the European Regional Science Association, Amsterdam.
- Let the children play 1997. *Local Government Digest* 16, 10: 68-70.
- Lindsey G, Maraj M & Kuan S 2001. Access, equity and urban greenways: An exploratory investigation. *The Professional Geographer* 53, 3: 332-346.
- Lourens L 1989a. Parks and playgrounds: A community advantage or disadvantage? *Education and Culture* 12, 2: 14-15.
- Lourens L 1989b. The evaluation of certain parks and playgrounds in Europe. *Munisipale & Openbare Dienste* 9, 4: 44-45.
- Madge C 1997. Public parks and the geography of fear. *Tijdschrift voor Economische en Sociale Geografie* 88, 3: 237-250.
- Mans GG 2009a. Access analysis: Data sets. Office PowerPoint presentation. Stellenbosch: CSIR.

- Maslow AH 1943. A theory of human motivation. *Psychological Review* 50, 4: 370-396.
- McCormack GR, Giles-Corti B, Bultman M & Pikora TJ 2006. Correlations of distances travelled to use recreational facilities for physical behaviours. *International Journal of Behavioural Nutrition and Physical Activity* 3, 18: 1-10.
- McDonald DA 1998. Three steps forward, two steps back: Ideology and urban ecology in South Africa. *Review of African Political Economy* 25, 75: 73-88.
- McDonald DA 2002. *Municipal bureaucrats and environmental policy in Cape Town: Background research series*. Johannesburg: Municipal Services Project.
- McDonald DA 2008. *World city syndrome: Neoliberalism and inequality in Cape Town*. New York: Routledge, Taylor & Francis Group.
- McDonald DA & Pape J 2002. *Cost recovery and the crisis of service delivery in South Africa*. Cape Town: HSRC Press.
- McDonald DA & Smith L 2002. *Privatizing Cape Town: Service delivery and policy reforms since 1996*. (Occasional Papers Series Number 7). Johannesburg: Municipal Services Project.
- McDonald M 1989. Future trends facing parks and recreation departments. *Parks Administration* 42, 3: 18-20.
- McInroy N 2000. Urban regeneration and public space: The story of an urban park. *Space & Polity* 4, 1: 23-40.
- Merrett C 2009. *Sport, space and segregation: Politics and society in Pietermaritzburg*. Pietermaritzburg: University of KwaZulu-Natal Press.
- Mitchell D 1995. The end of public space? People's park, definitions of the public and democracy. *Annals of the Association of American Geographers* 85, 1: 108-133.
- More TA 1990. *Factors affecting the productivity of urban parks*. (Research Paper No. NE-630). Pennsylvania: Northeastern Forest Experiment Station.
- Morris N 2003. *Black and minority ethnic groups and public open space: Literature review*. Edinburgh: OPENspace: The Research Centre for Inclusive Access to Outdoor Environments.
- Mowen AJ, Payne LL & Scott D 2005. Change and stability in park visitation constraints revisited. *Leisure Sciences* 27, 2: 191-204.
- Mubangizi JC & Mubangizi BC 2005. Poverty, human rights law and socio-economic realities in South Africa. *Development Southern Africa* 22, 2: 279-290.
- Nembudani ME 1997. Geographical analysis of public open spaces for recreational use in Gugulethu, Cape Town. Master's thesis. Stellenbosch: Stellenbosch University, Department of Geography and Environmental Studies.

- Nicholls S 2001. Measuring the accessibility and equity of public parks: A case study using GIS. *Managing Leisure* 6, 4: 201-219.
- Nighat S, Aslam SYK, Akhtar NG, Kousar AN, Safdar AS, Rasheed SH & Saddique S 2005. Valuation of green spaces in social life: A focus on parks and gardens. *Journal of Agriculture & Social Sciences* 1, 1: 176-177.
- Omer I & Or U 2005. Distributive environmental justice in the city: Differential access in two mixed Israeli cities. *Tijdschrift voor Economische en Sociale Geografie* 96, 4: 433-443.
- Page S, Nielsen K & Goodenough R 1994. Managing urban parks: User perspectives and local leisure needs in the 1990s. *The Service Industries Journal* 14, 3: 216-237.
- Pain R, Barke M, Fuller D, Gough J, MacFarlane R & Mowl G 2001. *Introducing social geographies*. New York: Oxford University Press.
- Pasaogullari N & Doratli N 2004. Measuring accessibility and utilization of public spaces in Famagusta. *Cities* 21, 3: 225-232.
- Payne LL, Mowen AJ & Orsega-Smith E 2002. An examination of park preferences and behaviours among urban residents: The role of residential location, race and age. *Leisure Sciences* 24, 2: 181-198.
- Penderis SP 1996. Informal settlements in the Helderberg Basin: People, places and community participation. Master's thesis. Stellenbosch: Stellenbosch University, Department of Geography and Environmental Studies.
- Pillay U, Tomlinson R & Du Toit J (eds) 2006. *Democracy and delivery: Urban policy in South Africa*. Cape Town: HSRC Press.
- Pincetl S & Gearin E 2005. The reinvention of public green space. *Urban Geography* 26, 5: 365-384.
- Poston B 2009. *An exercise in personal exploration: Maslow's hierarchy of needs*. Thornton: Everest College, Association of Surgical Technologists.
- Ravenscroft N & Markwell S 2000. Ethnicity and the integration and exclusion of young people through urban park and recreation provision. *Managing Leisure* 5, 3: 135-150.
- Ribeiro A & Antunes AP 2002. A GIS-decision support tool for public facility planning. *Environment and Planning B: Planning and Design* [online], 29: 553-569. Available from: <http://www.envplan.com> [Accessed 28 May 2009].
- Rishbeth C 2001. Ethnic minority groups and the design of public open space: An inclusive landscape? *Landscape Research* 26, 4: 351-366.
- Ruiters G 2001. Environmental racism and justice in South Africa's transition. *Politikon* 28, 1: 95-103.

- Saldivar-Tanaka L & Krasny ME 2004. Culturing community development, neighbourhood open space and civic agriculture: The case of Latino community gardens in New York City. *Agriculture and Human Values* 21, 4: 399-412.
- Sanesi G & Chiarello F 2006. Residents and urban green spaces. *Urban Forestry & Urban Greening* 4, 3: 125-134.
- Sasidharan V, Willits F & Godbey G 2005. Cultural differences in urban recreation patterns: An examination of park usage and activity participation across six population subgroups. *Managing Leisure* 10, 1: 19-38.
- Savasdisara T 1988. Residents' satisfaction and neighbourhood characteristics in Japanese urban communities. *Landscape and Urban Planning* 15, 3/4: 201-210.
- Seeland K, Dübendorfer S & Hansmann R 2009. Making friends in Zurich's urban forests and parks: The role of public green space for social inclusion of youths from different cultures. *Forest Policy and Economics* 11, 1: 10-17.
- Seeland K & Nicole S 2006. Public green space and disabled users. *Urban Forestry and Urban Greening* 5, 1: 29-34.
- Shafer CS, Lee BK & Turner S 2000. A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning* 49, 3/4: 163-178.
- Shi J, Zhao X, Ge J, Hokao K & Wang Z 2006. Relationship of public preferences and behaviour in residential outdoor spaces using analytic hierarchy process and principal component analysis: A case study of Hangzhou City, China. *Journal of Zhejiang University Science A* 7, 8: 1372-1385.
- Smith DM (ed) 1992. *The apartheid city and beyond: Urbanization and social change in South Africa*. Johannesburg: Witwatersrand University Press.
- Smith L & Vawda A 2003. Citizens vs. customer: Different approaches to public participation in service delivery in Cape Town. *Urban Forum* 14, 1: 26-52.
- South African Government 1994. The Reconstruction and Development Programme (RDP): A policy framework [online]. s.l.: s.n. Available from: <http://www.anc.org.za/rdp/rdpall.html> [Accessed on 21 October 2009].
- Soweto parks and recreation facilities 1995. *Munisipale & Openbare Dienste* 15, 4: 41-43.
- Speller G & Ravenscroft N 2005. Facilitating and evaluating public participation in urban parks management. *Local Environment* 10, 1: 41-56.
- Spocter MA 2008. Discussion document: User needs of park space in the city of Cape Town. (Office Report). Stellenbosch: CSIR.
- Stark R 1992. *Sociology*. 4th ed. Belmont: Wadsworth.

- Statistics South Africa 2001. *Census 2001 GIS data of the Western Cape*. Pretoria: Statistics South Africa.
- Statistics South Africa 2007. *2007 Community survey data*. Pretoria: Statistics South Africa.
- Swanwick C, Dunnett N & Woolley H 2003. Nature, role and value of green space in towns and cities: An overview. *Built Environment* 29, 2: 94-106.
- Swilling M, Humphries R & Shubane K (eds) 1991. *Apartheid city in transition*. Cape Town: Oxford University Press Southern Africa.
- Syme GJ, Fenton DM & Coakes S 2001. Lot size, garden satisfaction and local park and wetland visitation. *Landscape and Urban Planning* 56, 3: 161-170.
- Tierney PT, Dahl R & Chavez D 2001. Cultural diversity in use of undeveloped natural areas by Los Angeles county residents. *Tourism Management* 22, 3: 271-277.
- Tinsley HEA, Tinsley DJ & Croskeys CE 2002. Park usage, social milieu and psychosocial benefits of park use reported by older urban park users from four ethnic groups. *Leisure Sciences* 24, 2: 199-218.
- Torkildsen G 2005. *Leisure and recreation management*. 5th ed. New York: Routledge.
- Tucker P, Gilliland J & Irwin JD 2007. Splashpads, swings and shade: Parents' preference for neighbourhood parks. *Revue Canadienne De Santé Publique* 98, 3: 198-201.
- Tygerburger 2009a. A guide to smaller parks. 14 January: 11.
- Tygerburger 2009b. Animal by-law lays down new rules. 10 June: 9.
- Tygerburger 2009c. Duisende begroot vir parke. 25 November: 5.
- Tygerburger 2009d. Hande nodig om Majik Forest skoon te hou. 18 November: 3.
- Tygerburger 2009e. Hy laat nie gras onder voete groei ... 25 November: 18.
- Van der Zwan J, Van der Wel R, De Jong T & Floor H 2005a. Flowmap [online]. Utrecht: Utrecht University, Faculty of Geographical Sciences. Available from: <http://flowmap.geog.uu.nl/> [Accessed 30 November 2009].
- Van der Zwan J, Van der Wel R, De Jong T & Floor H 2005b. *Manual: Flowmap 7.2*. Utrecht: Utrecht University, Faculty of Geographical Sciences.
- Van Herzele A & Wiedemann T 2003. A monitoring tool for the provision of accessible and attractive urban green spaces. *Landscape and Urban Planning* 63, 2: 109-126.
- Van Zyl JC 1995. *Needs-based development strategy and the RDP: Some broad issues*. Halfway House South Africa: Development Bank of Southern Africa.
- Wall KC 1992. Competition for open spaces within South Africa's urban areas. *Civil Engineer in South Africa* 34, 9: 313-319.

- Walters C 2005. Parke as ruimtelike sosiaal-ekologiese bate in die Bellville munisipale gebied. Master's thesis. Stellenbosch: Stellenbosch University, Department of Geography and Environmental Studies.
- Welch D 1990. Parks and recreation: A multifunctional service. *Parks Administration* 16, 2: 9-11.
- Wenzel P 2007. Public-sector transformation in South Africa: Getting the basics right. *Progress in Development Studies* 7, 1: 47-64.
- Western Cape Government 1994. *Western Cape Reconstruction and Development Programme: Working towards a better life for all*. Cape Town: Western Cape Government.
- Western J 1981. *Outcast Cape Town*. Cape Town: Human & Rousseau.
- Wilkinson PF 1985. The golden fleece: The search for standards. *Leisure Studies* 4, 2: 189-203.
- Wilson GDH 1989. Ontspanning in die swart woongebiede van die PWV-streek: 'n Geografiese perspektief. Doctoral dissertation. Pretoria: University of Pretoria, Department of Geography.
- Wilson GDH 1992. Voorkeur- en deelnamepatrone in rekreasie: Rigtingwysers vir navorsing. *South African Journal for Research in Sport, Physical Education and Recreation* 15, 11: 66-72.
- Wilson GDH & De Wet NH 1992. *Demographic issues relevant to the future of sport and recreation in South Africa: Component 2: Sport, recreation and tourism in South Africa: Preference and participation patterns*. Pretoria: University of Pretoria.
- Wilson GDH & Hattingh PS 1989. Vryetydsgedrag van swart stedelinge in veranderende omstandighede. *South African Journal for Research in Sport, Physical Education and Recreation* 12, 1: 85-96.
- Wilson GDH & Hattingh PS 1990. Behoeftebepaling vir ontspanningsvoorsiening: 'n Praktiese benaderingswyse. *The South African Journal of Sociology* 22, 3: 95-100.
- Wilson GDH & Hattingh PS 1991. Ontspanning in stedelike swart woongebiede: Beplanningsriglyne in 'n krisissituasie. *Town and Regional Planning* 18, 32: 39-46.
- Wilson GDH & Hattingh PS 1992. Environmental preferences for recreation within deprived areas: The case of black townships in South Africa. *Geoforum* 23, 4: 477-486.
- Wilson GDH & Steyn JJ 1996. Classification as analytical tool for recreation planning. *Town and Regional Planning* 23, 40: 42-49.
- Wolf KL 2005. Civic nature: Valuation: Assessments of human functioning and well-being in cities. In *Forging solutions: Applying ecological economics in current problems*. Proceedings of the 3rd Biennial Conference of the U.S. Society for Ecological Economics held in 2005. Tacoma: Earth Economics.
- Wright EO 2005. Conclusion: If "class" is the answer, what is the question? In Wright EO (ed) *Approaches to class analysis*, 180-192. New York: Cambridge University Press.

Yilmaz S, Zengin M & Yildiz ND 2007. Determination of user profile at city parks: A sample from Turkey. *Building and Environment* 42, 6: 2325-2332.

Zhang T & Gobster PH 1998. Leisure preferences and open space needs in an urban Chinese American community. *Journal of Architectural and Planning Research* 15, 4: 338-355.

8 PERSONAL COMMUNICATIONS

Mans GG 2009b. Researcher. Council for Scientific and Industrial Research (CSIR). Stellenbosch. Interview on 17 November about GIS and Flowmap analysis of my study.

9 APPENDICES

- A** Permission to conduct research
- B** Afrikaans questionnaire
- C** English questionnaire
- D** IsiXhosa questionnaire
- E** Home languages spoken in the suburbs of the three income categories
- F** Recommendations for better park usage

APPENDIX A: PERMISSION TO CONDUCT RESEARCH

Navrae

Enquiries **Dr RS Cornellissen***IMibuzo*

Telefoon

Telephone **(021) 467 2286***IFoni*

Faks

Fax **(021) 425 7445***IFeksi*

Verwysing

Reference **20090310-0018***ISalathiso***Wes-Kaap Onderwysdepartement****Western Cape Education
Department****ISEbe leMfundo leNtshona Koloni**

DEAR MISS L. WILLEMSE

RESEARCH PROPOSAL: DETERMINING RESIDENTS' PREFERENCES AND PERCEPTIONS OF PARKS AND OPEN SPACES IN THE CAPE METROPOLE.

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

- 1 Principals, educators and learners are under no obligation to assist you in your investigation.
- 2 Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
- 3 You make all the arrangements concerning your investigation.
- 4 Educators' programmes are not to be interrupted.
- 5 The Study is to be conducted from **10th March 2009 to 30th September 2009.**
- 6 No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
- 7 Should you wish to extend the period of your survey, please contact Dr R. Cornelissen at the contact numbers above quoting the reference number.
- 8 A photocopy of this letter is submitted to the principal where the intended research is to be conducted.

- 9 Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
- 10 A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
- 11 The Department receives a copy of the completed report/dissertation/thesis addressed to:

THE DIRECTOR: RESEARCH SERVICES
WESTERN CAPE EDUCATION DEPARTMENT
PRIVATE BAG X9114
CAPE TOWN
8000

WE WISH YOU SUCCESS IN YOUR RESEARCH.

KIND REGARDS.

SIGNED: RONALD S. CORNELISSEN

FOR: HEAD: EDUCATION

DATE: 10TH MARCH 2009

MELD ASSEBLIEF VERWYSINGSNOMMERS IN ALLE KORRESPONDENSIE / PLEASE QUOTE REFERENCE NUMBERS IN ALL CORRESPONDENCE /

NCEDA UBHALE IINOMBOLO ZESALATHISO KUYO YONKE IMBALELWANO

GRAND CENTRAL TOWERS, LAER-PARLEMENTSTRAAT, PRIVAATSAK X9114, KAAPSTAD 8000

GRAND CENTRAL TOWERS, LOWER PARLIAMENT STREET, PRIVATE BAG X9114, CAPE TOWN 8000

WEB: <http://wced.wcape.gov.za>

INBELSENTRUM /CALL CENTRE

INDIENSNEMING- EN SALARISNAVRAE/EMPLOYMENT AND SALARY QUERIES ☎0861 92 33 22

VEILIGE SKOLE/SAFE SCHOOLS ☎ 0800 45 46 47

APPENDIX B: AFRIKAANS QUESTIONNAIRE



Plak nommer hier

Agtergrond van die navorsing

Die vraelys is deel van navorsing wat deur die Council for Scientific and Industrial Research (CSIR) (WNNR), vir die Stad Kaapstad gedoen word. Die navorsing sal help om inwoners se eienskappe, voorkeure en persepsies van gemeenskaps-/woonbuurtparke in hul gemeenskappe /woonbuurte te bepaal. Die vraelys sal die City Parks Departement help om effektiewe beplanning, ontwerp, bestuur en instandhouding van gemeenskaps-/woonbuurtparke in die Stad Kaapstad te implementeer. Anonimiteit en vertroulikheid word gewaarborg. Vul asseblief die vraelys so akkuraat en volledig as moontlik in en stuur dit terug aan u kind se onderwyser/ skoolhoof. Skakel gerus die navorser indien u enige verdere inligting verlang: Lodene Willemse, by (021) 888 2426 (gedurende kantoorure), of e-pos lwillemse@csir.co.za

Let asseblief op: Die navorsing gaan oor die gebruik/nie-gebruik van gemeenskaps-/woonbuurtparke. Gemeenskaps-/woonbuurtparke kan gedefinieer word as “grond wat ontwikkel kan word met ontspanningsfasiliteite, wat in die behoeftes van die plaaslike gemeenskap voorsien en wat normaalweg per voet bereik word. Dit sluit in informele ontspanningsfasiliteite op klein skaal vir kinders soos ‘tot-lots’ en speelgronde, sitplekke, oop grasperke en tuine” (City Parks Development Policy 2005).

Instruksies: Gebruik asseblief 'n **X** om u antwoord aan te dui waar opsies gegee word of vul die gepaste antwoord in die spasie in wat voorsien word.

1. Maak u merke slegs binne die grense van die blokkies, bv.
2. Gebruik 'n **donker potlood** of **swart pen**.
3. Moet asseblief nie die vraelys **vou** nie.

Die vraelys is aan albei kante van die bladsye gedruk.

A: ALGEMENE INLIGTING				
A1. In watter voorstad/area bly u:				
A2. Hoe lank bly u al in die voorstad/area?	<input type="text"/>	<input type="text"/>	jare	
A3. Het u 'n privaattuin?	Ja	<input type="checkbox"/>	Nee	<input type="checkbox"/>
A4. Besit iemand in u huishouding 'n motor?	Ja	<input type="checkbox"/>	Nee	<input type="checkbox"/>
A5. Wat is die getal huishoudingslede?	<input type="text"/>	<input type="text"/>		
A6. Wat is u huistaal?	Afrikaans	<input type="checkbox"/>	Engels	<input type="checkbox"/>
	Ander	<input type="checkbox"/>	Spesifiseer:	
A7. Waar spandeer kinders en volwassenes in u huishouding gewoonlik u BUITEMUURSE ontspanningstyd? (Meer as een opsie is moontlik).				
Plek	Kinders	Volwassenes	Kinders	Volwassenes
By 'n gemeenskapsaal	<input type="checkbox"/>	<input type="checkbox"/>	In u gemeenskaps-/woonbuurtpark	<input type="checkbox"/>
By die skool	<input type="checkbox"/>	<input type="checkbox"/>	Oop stukke grond rondom u huis	<input type="checkbox"/>
By sportgronde	<input type="checkbox"/>	<input type="checkbox"/>	By ander gemeenskapspark of bewaringsareas wat in ander woonbuurte/voorstede geleë is	<input type="checkbox"/>
By die huis	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
In die strate rondom u huis	<input type="checkbox"/>	<input type="checkbox"/>		

A8. Sedert die vorige plaaslike regeringsverkiesing, hoe sal u sê het die voorsiening van die volgende dienste, in u area waar u bly, verander?

Dienste	Verbeter	Bly dieselfde	Versleg	Onseker/ Weet nie
Klinieke en gesondheidsorg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Behuising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parke en rekreasie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paaie en sypaadjies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Veiligheid en sekuriteit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Straatligte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A9. Watter **TWEE** van die volgende tipes dienste wil u hê moet die Stadsraad in u woonbuurt verbeter en watter **TWEE** is die minste belangrik?

Dienste	Kies TWEE dienste om te verbeter	Kies TWEE dienste wat die minste belangrik is om te verbeter
Klinieke en gesondheidsorg	<input type="checkbox"/>	<input type="checkbox"/>
Behuising	<input type="checkbox"/>	<input type="checkbox"/>
Parke en rekreasie	<input type="checkbox"/>	<input type="checkbox"/>
Paaie en sypaadjies	<input type="checkbox"/>	<input type="checkbox"/>
Veiligheid en sekuriteit	<input type="checkbox"/>	<input type="checkbox"/>
Straatligte	<input type="checkbox"/>	<input type="checkbox"/>

B: PATRONE VAN BIODIVERSITEIT-/BEWARINGSAREAS GEBRUIK

B1. Is **biodiversiteit-/bewaringsareas** binne aanvaarbare afstand van u huis geleë?

Ja Nee

NS: Biodiversiteit-/Bewaringsareas word gedefinieer as: "grond wat ontwikkel kan word wat as natuureservaat, beskermde natuurlike omgewings, kern flora areas, ander areas met primêre biodiversiteitswaarde en areas met voëls, geproklameer is" (City Parks Development Policy 2005).

B2. Hoeveel dae, **in 'n jaar**, besoek kinders en volwassenes in u huishouding biodiversiteit-/bewaringsareas?

Kinders dae per jaar **Volwassenes** dae per jaar

B3. Indien u ja in vraag B1 geantwoord het, met ander woorde u huis is naby geleë aan biodiversiteit-/bewaringsareas, is meer gemeenskaps-/woonbuurtparke nodig in u woonbuurt?

Ja

Nee

Verduidelik asseblief :

.....

B4. Hoe gereeld besoek enige lid van u huishouding die Tafelberg Nasionale Park in 'n jaar?

Daaglik Weeklik Maandelik Elke twee maande Nooit

Indien nooit, gee asseblief die hoof redes hoekom nie:

.....

D: AKTIWITEITE WAT IN GEMEENSKAPS-/WOONBUURTPARKE GEDOEN WORD

D1: Om te verseker dat gemeenskapsparke voldoende fasiliteite aan inwoners verskaf, wat by hul behoeftes sal pas, is dit belangrik om te weet watter aktiwiteite inwoners in gemeenskaps-/woonbuurtparke doen. (Merk asseblief met 'n X. Meer as een opsie is moontlik).

Aktiwiteite wat mense doen in gemeenskaps-/woonbuurtparke	Kinders*	Volwasse-nes*	Ander inwoners*		Kinders*	Volwasse-nes*	Ander inwoners*
Gaan saam met kinders na die speelgrond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Neem in die vars lug/Ontvlug die stad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Braai	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sit/Ontspan/Rus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gaan saam met jou geliefde na die gemeenskapsparke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sport (bv: sokker, krieket, rugby, tennis, gholf)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ry fiets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hardloop/Draf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oefening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Praat/Sosialiseer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Piekniek	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Kyk na mense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kyk na wildlewe en die natuur/plante	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bekyk die omgewing/natuur	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speel met die frisbee of met ander speelgoed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speel op die klimrame wat verskaf is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loop met die hond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speel/Speel speletjies (soos wegkruipertjie)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Werk/Studeer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skaats/Skaatsplankry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ander	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ander: (Spesifiseer).....							

***Kinders:** Kinders in u huishouding **Volwasse-nes:** Volwasse-nes in u huishouding

Ander inwoners: m.a.w. wanneer u die gemeenskapsparke besoek, waarvoor gebruik ander inwoners dit

E: Bestuur/instandhouding van gemeenskaps-/woonbuurtparke se fasiliteite

E1. Hoe sal u die kwaliteit van die dienste en fasiliteite in die gemeenskaps-/woonbuurtparke wat kinders en volwasse-nes in u huishouding besoek, in u woonbuurt, rangskik. (Merk asseblief met 'n X die antwoord wat u kies. Indien u antwoord gemiddeld, sleg of baie sleg of altyd is; spesifiseer asseblief die redes vir die antwoord in die spasie wat verskaf is).

Dienste/Fasiliteite verskaf in gemeenskaps-/woonbuurtparke wat u en lede van u huishouding gebruik	Rangskikking (Slegs een opsie per item)					Motiveer u antwoord as u <u>gemiddeld, sleg of baie sleg</u> geantwoord het
	Uitstekend	Goed	Gemiddeld	Sleg	Baie sleg	
Toeganklikheid/Nabyheid tot u gemeenskaps-/woonbuurtparke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Algemene skoonheid van die parke (met ander woorde die parke se hoeveelheid vullis)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Algemene instandhouding van parke	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fasiliteite om te parkeer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Persoonlike veiligheid en sekuriteit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Klimrame vir kinders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sitplekke/tafels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Skaduwee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Dienste/Fasiliteite verskaf in gemeenskaps-/woonbuurtparke wat u en lede van u huishouding gebruik	Rangskikking (Slegs een opsie per item)					Motiveer u antwoord as u <u>gemiddeld, sleg of baie sleg</u> geantwoord het
	Uitstekend	Goed	Gemiddeld	Sleg	Baie sleg	
Toestand van die gras/bome/plante	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toilet fasiliteite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dinge wat probleme vir u skep in die park	Rangskikking (Slegs een opsie per item)			Motiveer u antwoord as u <u>altyd</u> geantwoord het (byvoorbeeld as u sê dat honde altyd probleme skep, verduidelik hoekom u so sê)		
	Altyd	Soms	Nooit			
Honde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Tekens van haweloses/Mense wat dwelms en drank gebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Tekens van vandalisme en gemors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Jongmense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

E2. Watter fasiliteite sal kinders en volwassenes in u huishouding in gemeenskaps-/woonbuurtparke wil byvoeg om beter gebruik te verseker? (*Spesifiseer fasiliteite*):

.....

Redes:

E3. Hoe lyk u huishouding se ideale gemeenskaps-/woonbuurtpark? (*Verduidelik asseblief*)

.....

.....

E4. Enige verdere kommentaar of voorstelle oor gemeenskaps-/woonbuurtpark gebruik in u gemeenskap/woonbuurt:

.....

.....

BAIE DANKIE VIR U DEELNAME!

APPENDIX C: ENGLISH QUESTIONNAIRE



Plak nommer hier

Research Background:

This questionnaire forms part of research being conducted by the Council for Scientific and Industrial Research (CSIR) for the City of Cape Town. The research will help determine residents' characteristics, preferences and perceptions about community/**neighbourhood parks** in their communities/neighbourhoods. This questionnaire will help to inform effective planning, design, management and maintenance of community/neighbourhood parks in the City of Cape Town, by the City Parks Department. Complete anonymity and confidentiality is guaranteed. Please complete this questionnaire as accurately and completely as possible and send it back to your child's teacher/principal. Please feel free to contact the researcher if more information is required. Lodene Willemse, at (021) 888 2426 (during office hours); or e-mail lwillemse@csir.co.za.

Please note: This research is about community/neighbourhood parks usage. Community/Neighbourhood parks are defined as “developable land with recreation facilities, which serve the needs of the local community or neighbourhood and are usually accessed on foot. It includes informal recreational facilities of small scale for children such as tot-lots and playgrounds, seating areas, open grass lawns and gardens” (City Parks Development Policy 2005).

Instructions: Please use an X to indicate your answer where options are given or fill in the appropriate answers in the space provided.

1. Make your marks only within the boundaries of the boxes, e.g.
2. Use a dark pencil or black pen.
3. Please do not fold this paper.

The questionnaire is printed on both sides of the papers.

A: GENERAL INFORMATION					
A1. What is the name of your suburb/area of residence:					
A2. How long have you stayed in this suburb/area of residence?		<input type="text"/> <input type="text"/> years			
A3. Do you have a private garden?		Yes <input type="checkbox"/> No <input type="checkbox"/>			
A4. Does someone own a car in the household?		Yes <input type="checkbox"/> No <input type="checkbox"/>			
A5. What is the number of household occupants?		<input type="text"/> <input type="text"/>			
A6. What is your home language?		Afrikaans <input type="checkbox"/> English <input type="checkbox"/> African language <input type="checkbox"/> Other <input type="checkbox"/> Specify:			
A7. Where do children and adults of your household usually spend their outdoor recreational time? (More than one option is possible).					
Place	Children	Adults	Place	Children	Adults
At a community centre	<input type="checkbox"/>	<input type="checkbox"/>	In your community/neighbourhood park	<input type="checkbox"/>	<input type="checkbox"/>
At school	<input type="checkbox"/>	<input type="checkbox"/>	Open pieces of land surrounding your house	<input type="checkbox"/>	<input type="checkbox"/>
At sports grounds	<input type="checkbox"/>	<input type="checkbox"/>	Other community parks or conservation areas located in other neighbourhoods/suburbs	<input type="checkbox"/>	<input type="checkbox"/>
At your home	<input type="checkbox"/>	<input type="checkbox"/>			
In the streets surrounding your house	<input type="checkbox"/>	<input type="checkbox"/>			

A8. Since the previous local government elections, how would you say the delivery of the following services has changed in the area where you live?

Service	Improved	Stayed the same	Worsened	Uncertain/ Do not know
Clinics and health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks and recreation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roads and sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety and security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Street lights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A9. Which **TWO** of the following kinds of services would you like the City Council to improve in your neighbourhood and which **TWO** are least important?

Service	Tick two services to improve	Tick two services least important to improve
Clinics and health	<input type="checkbox"/>	<input type="checkbox"/>
Housing	<input type="checkbox"/>	<input type="checkbox"/>
Parks and recreation	<input type="checkbox"/>	<input type="checkbox"/>
Roads and sidewalks	<input type="checkbox"/>	<input type="checkbox"/>
Safety and security	<input type="checkbox"/>	<input type="checkbox"/>
Street lights	<input type="checkbox"/>	<input type="checkbox"/>

B: PATTERNS OF BIODIVERSITY AND CONSERVATION AREAS USE

B1 Are **biodiversity/conservation areas** situated within reasonable driving distance from your house?
 Yes No

PS: Biodiversity/Conservation areas are defined as: “developable land set aside as proclaimed nature reserves, protected natural environments, core flora sites, other sites with primary biodiversity value and bird sanctuaries” (City Parks Development Policy 2005).

B2. How many days, **in a year**, do children and adults in your household visit biodiversity/conservation areas?
Children days per year **Adults** days per year

B3. If you answered yes in question B1, in other words your home is closely situated to biodiversity/conservation areas, are more community/neighbourhood parks needed in your neighbourhood?
 Yes
 No
Please explain:

B4. How often do you or any member of your household visit any part of the Table Mountain National Park in a year?
 Daily Weekly Monthly Every two months Never

If never, please give the main reasons why not:

D: ACTIVITIES DONE IN COMMUNITY/NEIGHBOURHOOD PARKS

D1 In order to ensure that community parks provide residents with adequate facilities, which will suit their needs, it is important to know activities that residents, engage in community/neighbourhood parks. (Mark with an X. More than one option is possible).

Activities people do in the community/neighbourhood parks	Children* Adults* Other residents*				Children Adults Other residents*		
	Children*	Adults*	Other residents*		Children	Adults	Other residents*
Accompanying children to playground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Taking in the fresh air / Escape from the city	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Braai/Barbeque	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sitting/Relaxing/Rest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dating/Showing affection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sports (examples: soccer, cricket, rugby, tennis, golf)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Run/Jog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Talking/Socializing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picnic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Watch people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Observing wildlife and nature/plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Viewing the landscape/environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play Frisbee or with other toys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play on play equipment provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Walk the dog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Play/Play games (such as hide and seek)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Working/Studying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rollerblades/Skateboards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: (Specify).....							

***Children:** Children in your household **Adults:** Adults in your household
Other residents: i.o.w. when you visit the community parks , for what purpose do other residents use it

E: Management/maintenance of community/neighbourhood parks' facilities

E1. Please rate the quality of the services, amenities and facilities provided in the community/neighbourhood parks that children and adults in your household visit in your neighbourhood. (Mark with a X. If your answer is average, poor or very bad, or always, please specify the reasons for the answer in the space provided).

Services / Amenities / Facilities provided in community/neighbourhood parks that you and members of your household use	Rating (Only one rating per item)					Motivate your answer if it is average, poor or very bad
	Excellent	Good	Average	Poor	Very bad	
Accessibility/Proximity to your community/neighbourhood park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Overall maintenance of the parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Parking facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Personal safety and security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Play equipment for children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seats/benches/tables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shaded areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
State of the grass/trees/plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Toilet facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Nuisance in the park	Rating (Only one rating per item)			Motivate your answer if you choose <u>always</u> (for example when you say that dogs are always a nuisance, explain why you say so)
	Always	Seldom	Never	
Dogs as a nuisance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Presence of homeless/drug users/drunks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signs of vandalism and litter as a nuisance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Youngsters as a nuisance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

E2. What facilities/amenities would children and adults in your household like to add to community/neighbourhood parks in your neighbourhood in order to ensure better use? (*Specify facilities*):

.....

Reasons:

E3. What does your households' ideal community/neighbourhood park look like? (*Please explain*)

.....

E4. Any further comments or suggestions about community/neighbourhood park usage in your community/neighbourhood:

.....

THANK YOU VERY MUCH FOR YOUR PATICIPATION!

APPENDIX D: ISIXHOSA QUESTIONNAIRE



Plak nommer hier

Imeko yophando

Eli phepha lemibuzo lilungu uphando olukwenzela isixeko saseKapa, nguCouncil for Scientific and Industrial Research (CSIR). Olu phando luza kunceda ukumisa iimpawu namakhethe nokuqonda kwabamni ngokusebenzisa iipaka (iipaki) zobumelwane zabo. Eli phepha lemibuzo liza kunceda ukufumana amacebo noyilo nempatho nokugcina okukakuhle kweepaka (kweepaki) zobumelwane esixeko saseKapa, nguCity Parks. Sithembisa ukugcina olu lwazi ngokungaziwa nenjengehlebo. Nceda, phendula yonke imibuzo ngendlela elungisa **ESINGESI**. Umele ukulithumela eli phepha lemibuzo utitshala/inqununu womntwana wakho. Ungaphona ukuthetha nomphandi, xa ufuna ulwazi ngophando, ULodene Willemse (021) 888 2426, ngamaxesha omsebenzi

Qaphela: Luphando lweepaka/lweepaki zobumelwane. Iipaka / Iipaki zobumelwane “ngumhlaba omnobuchule (ifacilities) bokuzonwabisa, kwaye zinikela amathuba ubumelwane ukuya kweepaka / kweepaki ngeenyawo. Ziquka ubuchule bokuzonwabisa babantwana obuncinci ‘njengetot-lots’ nebala lokudlala, iindawo zokuhlala, iindawo zengca neegadi” (iCity Parks Development Policy 2005).

Imiyalelo: Nceda, sebenzisa X ukuphendula le mibuzo, xa ungakhetha ukhetho lwakho, okanye unika impendulo yakho, xa kukho imigca okanye izithuba zokubhala.

1. Nceda, pendula ngosiba omnyama kuphela.
2. Nceda, khetha impendulo yakho phakathi kweebhokisi, kuphela.
3. Musa ukushwabanisa eli phepha lemibuzo.

Eli phepha lemibuzo lishicilela / libhalwe macala ephepheni. NCEDA, PHENDULA YONKE IMIBUZO

NGESINGESI, SUKUPHENDULA NGESIXHOSA.

A: IMIBUZO EMIBANZI			
A1. Leliphi ligama lendawo yokuhlala yakho			
A2. Uhlala amaxesha amangakanani kule ndawo?		<input type="text"/>	Bhala iminyaka emingakanani
A3. Unayo igadi eyeyakho kwekhaya lakho?		Ewe <input type="checkbox"/>	Havi <input type="checkbox"/>
A4. Ukhona umntu othile onemoto kwekhaya lakho?		Ewe <input type="checkbox"/>	Havi <input type="checkbox"/>
A5. Bangaphi abantu bahlala kwekhaya lakho? Nceda, bhala inani phezu komgca?			<input type="text"/>
A6. Loluphi ulwimi nithetha kwekhaya lakho?		IsiBhulu <input type="checkbox"/>	IsiNgesi <input type="checkbox"/> Ulwimi lwesintu <input type="checkbox"/> Olunye ulwimi <input type="checkbox"/>
(Nika ulwimi olunithethayo)			
A7. Abantwana nabantu bekhaya lakho, badla ngokuchitha amaxesha wokuzonwabisa kwaphandle phi? (Ungakhetha iimpindulo ezininzi).			
Indawo	Abantwana	Abantu	AbantwanaAbantu
Eholweni lobumelwane	<input type="checkbox"/>	<input type="checkbox"/>	Kweepaki zobumelwane/ Eepakeni zobumelwane <input type="checkbox"/> <input type="checkbox"/>
Esikolweni	<input type="checkbox"/>	<input type="checkbox"/>	lixenye zomhlaba omvulayo ezingqongileyo indlu yakho / ikhaya lakho <input type="checkbox"/> <input type="checkbox"/>
Ebaleni lokudlala imidlalo	<input type="checkbox"/>	<input type="checkbox"/>	
Kwendlu yakho / Kwekhaya lakho / Ekhayeni lakho	<input type="checkbox"/>	<input type="checkbox"/>	Ezinye iipaka / iipaki zobumelwane okanye iindawo zolondolozo / ezigcina izilwanyana nendalo phakathi kwezinye izintmelwane <input type="checkbox"/> <input type="checkbox"/>
Ezitratweni ezingqongileyo indlu yakho / ikhaya lakho / Eendleleni ezingqongileyo indlu yakho / ikhaya lakho			<input type="checkbox"/> <input type="checkbox"/>

A8. Kususela oko kugcinwe unyulo kaRhulumente wophondo oludlulileyo, uza kuthi kunjani uRhulumente utshintsha indlela yokunika iinkonzo kobumelwane bakho?

linkonzo	linkonzo ziphucula	linkonzo azitshintsha	linkonzo ziya phantsi (zibi kakhulu)	Akuqinisekanga / Akukwazi iinkonzo zinjani
likliniki nezibhedlele nempilo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Izindlu / Amakhaya	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iipaka / Iipaki nokuzonwabisa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iindlela / izitrato nepevemente	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ukhuselo / Ukhuseleko	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Izibane zendlela / zezitrato	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A9. Zeziphi iinkonzo **ezimbini** ufuna zimele ukuphuculwa, kobumelwane bakho, nguCity Council, kwaye zeziphi iinkonzo **ezimbini** azibalulekanga ukuphucula kakhulu?

linkonzo	Khetha iinkonzo ezimbini eziphuculwa	Khetha iinkonzo ezimbini azibalulekanga ukuphucula
likliniki nezibhedlele nempilo	<input type="checkbox"/>	<input type="checkbox"/>
Izindlu / Amakhaya	<input type="checkbox"/>	<input type="checkbox"/>
Iipaka / Iipaki nokuzonwabisa	<input type="checkbox"/>	<input type="checkbox"/>
Iindlela / izitrato nepevemente	<input type="checkbox"/>	<input type="checkbox"/>
Ukhuselo / Ukhuseleko	<input type="checkbox"/>	<input type="checkbox"/>
Izibane zendlela / zezitrato	<input type="checkbox"/>	<input type="checkbox"/>

B: IINDLELA ZOKUSEBENZISA IINDAWO ZEBIODIVERSITY NEENDAWO ZOLONDOLOZO / EZIGCINA IZILWANYANA NENDALO

B1 Ungahamba ngemoto kulula ungafika **kweendawo zebiodiversity neendawo zolondolozo / ezigcina izilwanyana?** Ewe Havi

Qaphela: Iindawo zebiodiversity neendawo zolondolozo / ezigcina izilwanyana nendalo “ngumhlaba omgcinwa ukuhlasela ummandla obekelwe izilwanyana neentaka nezityalo ezinobubodwa elizweni lethu” (iCity Parks Development Policy 2005).

B2. Abantwana nabantu bekhaya lakho, batyelela iimini ezingaphi zomnyaka iindawo zebiodiversity neendawo ezigcina izilwanyana nendalo?

Abantwana **linani zeemini zomnyaka** Abantu **linani zeemini zomnyaka**

B3. Xa uphendula ‘ewe’ kumbuzo B1, ngamanye amagama ikhaya lakho likufuphi iindawo zebiodiversity neendawo ezigcina izilwanyana nendalo, ucinga ubumelwane bakho bamele ukufumana iipaka / iipaki zobumelwane ezidibanisa??

Ewe

Havi

Nceda, cacisa impendulo yakho esiNgesi:

.....

B4. Amalungu endlu yakho, atyelela kangaphi na, iixenye zePaka / zePaki zeNtaba yeTafile, ngomnyaka?

Zonke iimini Zonke iiveki Zonke iinyanga Qho emva kweenyanga ezimbini

Anizange ukutyelele iixenye zePaki zeNtaba yeTafile

Xa uphendula anizange ukutyelele iixenye zePaki zeNtaba yeTafile, nceda cacisa, **esiNgesi**, izizathu kutheni aningayityeleli:

.....

C: IINDLELA ZOKUSEBENZISA IIPAKA / IIPAKI ZOBUMELWANE

C1: Iipaka / Iipaki zobumelwane zakho zinomgama zingakanani, okanye nithatha ixesha elingakanani, xa nihamba ngeenyawo ukusuka kwendlu yenu?

0-5 imizuzu 6-10 imizuzu 11-15 imizuzu Ndithatha imizuzu kune-15

OKANYE

0-50 iimeta 51-100 iimeta 101-200 iimeta

201-300 iimeta 301-400 iimeta Ndimele ukuhamba iimeta kune-400

C2: Abantwana nabantu bekhaya lakho batyelela iimini ezingaphi **kweveki** iipaka / iipaki zobumelwane?

Xa uphendula 'anizange ukutyelele iipaki zobumelwane', ngoko ke nceda, phendula umbuzo C2(1) kuphela.. Xa akungaphenduli 'anizange ukutyelele iipaki zobumelwane', ngoko ke nceda, umele ukuphendula yonke imibuzo, ngaphandle kombuzo C2(1).

	Imini enye	Iimini ezimbini	Iimini ezinthathu	Iimini ezine	Iilimi ezinhlanu	Iilimi ezinthandathu	Iilimi ezinxhenxe	Anizange ukutyelele iipaki zobumelwane
Abantwana	<input type="checkbox"/>							
Abantu	<input type="checkbox"/>							

C2(1). Kutheni abantwana nabantu bekhaya lakho abangasebenzisi iipaka / iipaki zobumelwane? (Kuphela abantu abaphendule, ngumbuzo C2 ukuba 'abazange ukutyelele iipaka / iipaki zobumelwane', bamele ukuphendula lo mbuzo).

Plak nommer hier

Izizathu kutheni abantwana nabantu abangatyeleli iipaki zobumelwane: Sebenzisa X ukukhetha impenduloyakho.(Ungakhetha iimpindulo ezininzi.)

Kuba nityelele ezinye iipaka / iipaki zobumelwane okanye ezinye iipaki zommandla okanye iindawo ezigcina izilwanyana nondalo	<input type="checkbox"/>	Ezi paka / Ezi paki zobumelwane azinkhulu ukuze usapho lwakho lungenza izinto ezilufunayo / eziluthandayo	<input type="checkbox"/>
Kukho abantu abasebenzisa iipaki zobumelwane balwana	<input type="checkbox"/>	Iipaka / Iipaki azigcinwa ngemeko entle	<input type="checkbox"/>
Iipaki zobumelwane zineengxaki ngabantu abasebenzisa utywala, iziyobisi kwaye kukho abantu banamaqela wabantu abasenza izinto ezibi kakhulu (i-gangs)	<input type="checkbox"/>	Imithi nezityalo zikhula phezulu kakhulu ukuze zenze iindawo azingaboni kulula	<input type="checkbox"/>
Kukho uloyiko lwahlaselwa ngenxa uhlango lwakho kweepaki zobumelwane	<input type="checkbox"/>	Alukho ukhuselo nokhuseleko kweepaki zobumelwane	<input type="checkbox"/>
Kukho uloyiko lwahlaselwa ngenxa isini sakho kweepaki zobumelwane	<input type="checkbox"/>	Kukho iingxaki ngezilo / ngezilwanyana njengezinja	<input type="checkbox"/>
Iintlangantwa nabantu abamangalisa batyelela iipaki zobumelwane	<input type="checkbox"/>	Usapho lwakho alinamaxesha ukutyelela iipaki zobumelwane	<input type="checkbox"/>
Ndinobulwelwe	<input type="checkbox"/>	Ayikho imithi eninzi kwaye ayikho indalo entle	<input type="checkbox"/>
Iipaki zobumelwane azinokufikelelwa kulula	<input type="checkbox"/>	Ayikho indawo yokumisa iimoto	<input type="checkbox"/>
Kukho abantu abaninzi kweepaki zobumelwane	<input type="checkbox"/>	Iipaka / Iipaki azigcinwa ngemeko entle	<input type="checkbox"/>
Iipaki zobumelwane zinemigama emininzi ukusuka kwendlu yakho	<input type="checkbox"/>	Ezinye izinto (Cacisa impenduloo yakho esiNgesi)	<input type="checkbox"/>
Iipaka / Iipaki zobumelwane azinobuchule / azinezinto ukukwenza	<input type="checkbox"/>		

C3: Abantwana nabantu bekhaya lakho bahlala nge-avereji yamaxesha angaphi kweepaki zobumelwane ngotyetelelo?

	0-15 imizuzu	16-30 imizuzu	31-60 imizuzu	Ndihlala kuneyure enye (Ndihlala imizuzu kune-60)
Abantwana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abantu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C4: Abantwana nabantu bekhaya lakho badla ngokuya kweepaki zobumelwane ngeziphi izithuthi / ngoluphi uthutho?									
	Nihamba ngeenyawo zenu	Nibaleka	Nihamba Ngebhayisekile	Nihamba ngemoto yenu	Nihamba ngesithuthuthu	Nihamba ngetaxi	Nihamba ngebhasi	Nihamba ngololiwe	Ezinye izithuthi (Cacisa)
Abantwana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abantu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D: IZINTO ZOKUWONWABISA EZENZWAYO KWEENAKI ZOBUMELWANE									
D1: Ukuqinisekisa ukuba iipaki zobumelwane zinikela izinto ukwenza abantu abazithandayo, kubalulekileyo ukwazi zeziphi izinto ezibenzwa ngabantu kweepaki zobumelwane. Sebenzisa X ukukhetha ukhetho. (Ungakhetha iimpendulo ezininzi).									
Izinto zokuwonwabisa ezenzwayo kweepaki zobumelwane ngabantu	Abantwana*	Abantu*	Abanye abantu*		Abantwana*	Abantu*	Abanye abantu*		
Uthatha abantwana ukudlala kweepaki / Abanye abantu bathatha abantwana ukudlala kweepaki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukudlala imidlalo (imizakelo: iqakamba, isoka, intenetya, umbhoxo, igalufa)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Uyosa inyama phandle kweepaki zobumelwane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukuhlala phantsi / Ukuyekelela / Ukuphumla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukuhamba ngesithandwa sakho / Ukubonisa ukuthandana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukufumana umoya upholileyo / Ukuphumza ingqondo ukuze ungalibale isixeko	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukuhamba ngebhayisekile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukubaleka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukuthamba / Ukuqeqesha umzimba wakho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukuthetha nabanye abantu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukujonga izilwanyana nendalo / izityalo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukuhamba ngeenyawo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukuya ngepikiniki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukuhamba ngenja yakho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukudla ngefrisbee okanye ukudlala nezinye izinto zokudlala	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukujonga / Ukubukela abantu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Izityibilikisi ezinamavili ezibotshelwe phantsi kwezihlangu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukubukela indalo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukudlala / Ukudlala imidlalo 'njengehide and seek')	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ukusebenza / Ukufunda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ukusebenza / Ukufunda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ezinye izinto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Ezinye izinto ezenzwayo kweepaki zobumelwane (cacisa esiNgesi)									
* Abantwana: Abantwana bekhaya lakho * Abantu: Abantu bekhaya lakho									
* Abanye abantu: Abanye abantu basebenzisa iipakie zobumelwane umzekelo, xa utyelela iipakie zobumelwane, zziphi izinto ezenzwa ngabanye abantu									
E: Ipatho nokugcinwa kweepaki zobumelwane									
E1. Nceda, thelekelela / xabisa ubulunga beenkonzo ezinikwayo kweepaki zobumelwane ezityelelwayo ngabantwana nabantu bekhaya lakho. (Nceda, nika izizathu, kwezithuba zokubhala, xa uphendula i-avereji, kakubi, kakubi kakhulu okanye soloko).									
Ubulunga beenkonzo ezinikwayo kweepaki zobumelwane ezityelelwayo ngabantu bekhaya lakho	Ukuthelakela / Ixabiso (Sebenzisa isanqa) (Nika ukuthelakela okanye okanye ixabiso elinye ngenkonzo kuphela)					Nika izizathu xa uphendula i-avereji, kakubi, kakubi kakhulu			
	Balasele kakhulu	Inkonzo ifanelekile	i-Avereji	Kakubi	Kakubi kakhulu				
Ukuba nokufikelelwa / Ukuba kufuphi kweepaki zobumelwane zakho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Ucoceko lweepaki zobumelwane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Ukugcinwa kweepaki zobumelwane zakho	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Ubulunga beenkonzo ezinikwayo kweepaki zobumelwane ezityelwayo ngabantu bekhaya lakho	Ukutholekela / Ixabiso (Sebenzisa isanqa) (Nika ukutholekela okunye okanye ixabiso elinye ngenkonzo kuphela)					Nika izizathu xa uphendula <u>i-avereji, kakubi, kakubi kakhulu</u>
	Balaselela kakhulu	Inkonzo ifanelekile	i-Avereji	Kakubi	Kakubi kakhulu	
Iindawo zokumisa iimoto	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ukhuselelo / Ukhuseleko	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ukuxhotyiswa kwabantwana kokudlala/ Izixhobo zabantwana zokudlala	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Izitulo / libhanki / litafle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Iindawo zinomthunzi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Imeko yengca / yemithi / yezityalo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Abantwana bankathaza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Izinto ezintshontsho / Izinto ezinkathaza kweepaki zobumelwane	Ukutholekela / Ixabiso (Sebenzisa isanqa) (Nika ukutholekela okunye okanye ixabiso elinye ngenkonzo kuphela)			Nika izizathu xa uphendula <u>soloko</u> (umzekelo: xa uthetha izinja zisoloko zinkathaza, cacisa kutheni usithi nje)		
	Soloko	Lento inqaza	Lento ayinkathaza zange			
Izinja zinkathaza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Iintangantwa nabantu abasebenza utywala neziyobisi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Iimpawu zenkunkuma nokonakalisa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Abantwana bankathaza	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			



Plak nommer hier

E2. Abantwana nabantu bekhaya lakho bafuna ukudibanisa zeziphi iinkonzo / obuphi ubuchule kweepaki zobumelwane, kobumelwane bakho, ukuze ezi paki zisetyenzisweyo kungcono? (Cacisa iinkonzo / ubuchule **esiNgesi**)

.....

.....

Nika izizathu **esiNgesi**

E3. Kunjani abantu bekhaya lakho bafuna iipaki zobumelwane zimele ukukhangeleka zibe njani? (Cacisa *impendulo yakho esiNgesi*)

.....

.....

E4. Uneenkcazo / Unokuceba ngokuzebenzisa kweepaki zobumelwane kobumelwane bakho. **Nceda, bhala esiNgesi:**

.....

.....

ENKOSI KAKHULU UPHENDULA ELI PHEPHA LEMIBUZO!

APPENDIX E: HOME LANGUAGES SPOKEN IN THE SUBURBS OF THE THREE INCOME CATEGORIES

Table E1 Home languages spoken in the suburbs of the three income categories

Suburbs located in income categories	Home language			
	Afrikaans (n = 203)	English (n = 188)	African language (n = 13)	Other languages (n = 8)
Boston	13% (n = 26)	0% (n = 0)	0% (n = 0)	0% (n = 0)
Camps Bay	1% (n = 1)	3% (n = 6)	0% (n = 0)	13% (n = 1)
Claremont	0% (n = 0)	3% (n = 6)	92% (n = 12)	38% (n = 3)
Durbanville	10% (n = 21)	9% (n = 17)	0% (n = 0)	13% (n = 1)
Edgemean	1% (n = 1)	12% (n = 23)	0% (n = 0)	13% (n = 1)
Gardens	11% (n = 22)	1% (n = 2)	0% (n = 0)	0% (n = 0)
Goodwood	7% (n = 15)	5% (n = 10)	0% (n = 0)	0% (n = 0)
Kalk Bay	1% (n = 2)	4% (n = 8)	0% (n = 0)	0% (n = 0)
Melkbosstrand	3% (n = 7)	4% (n = 7)	0% (n = 0)	0% (n = 0)
Monte Vista	5% (n = 10)	8% (n = 15)	0% (n = 0)	0% (n = 0)
Newlands	2% (n = 4)	8% (n = 15)	0% (n = 0)	0% (n = 0)
Parow	11% (n = 23)	1% (n = 1)	0% (n = 0)	0% (n = 0)
Rondebosch	2% (n = 4)	21% (n = 39)	8% (n = 1)	25% (n = 2)
Somerset West	3% (n = 7)	9% (n = 17)	0% (n = 0)	0% (n = 0)
Stellenberg	9% (n = 19)	0% (n = 0)	0% (n = 0)	0% (n = 0)
Tamboerskloof	1% (n = 1)	10% (n = 18)	0% (n = 0)	0% (n = 0)
Tokai	7% (n = 15)	2% (n = 4)	0% (n = 0)	0% (n = 0)
Welgelegen	12% (n = 25)	0% (n = 0)	0% (n = 0)	0% (n = 0)
Middle-income suburbs	Afrikaans (n = 207)	English (n = 167)	African language (n = 5)	Other languages (n = 4)
Athlone	4% (n = 8)	7% (n = 11)	0% (n = 0)	0% (n = 0)
Beacon Valley Mitchells Plain	5% (n = 10)	6% (n = 10)	0% (n = 0)	0% (n = 0)
Bellville South	9% (n = 18)	0% (n = 0)	0% (n = 0)	0% (n = 0)
Bishop Lavis	10% (n = 21)	2% (n = 3)	0% (n = 0)	25% (n = 1)
Bonteheuwel	3% (n = 7)	7% (n = 12)	0% (n = 0)	0% (n = 0)
Bridgetown Athlone	1% (n = 2)	2% (n = 3)	0% (n = 0)	0% (n = 0)
Cravenby Parow	3% (n = 7)	8% (n = 13)	0% (n = 0)	25% (n = 1)
Fish hoek	3% (n = 7)	4% (n = 7)	20% (n = 1)	0% (n = 0)

Continued overleaf

Table E1 continued

Suburbs located in income categories	Home language			
	Afrikaans (n = 207)	English (n = 167)	African language (n = 5)	Other languages (n = 4)
Kraaifontein	5% (n = 10)	9% (n = 15)	80% (n = 4)	50% (n = 2)
Kuilsriver	8% (n = 17)	4% (n = 6)	0% (n = 0)	0% (n = 0)
Matroosfontein Elsie's River	8% (n = 16)	5% (n = 8)	0% (n = 0)	0% (n = 0)
Nooitgedacht Bishop Lavis	8% (n = 17)	3% (n = 5)	0% (n = 0)	0% (n = 0)
Plumstead	0% (n = 0)	14% (n = 24)	0% (n = 0)	0% (n = 0)
Portlands Mitchells Plain	4% (n = 8)	8% (n = 13)	0% (n = 0)	0% (n = 0)
Retreat	6% (n = 13)	7% (n = 11)	0% (n = 0)	0% (n = 0)
Rocklands Mitchells Plain	4% (n = 8)	10% (n = 16)	0% (n = 0)	0% (n = 0)
Saxon Sea Atlantis	12% (n = 25)	0% (n = 0)	0% (n = 0)	0% (n = 0)
Woodlands Mitchells Plain	6% (n = 13)	6% (n = 10)	0% (n = 0)	0% (n = 0)
Low-income suburbs	Afrikaans (n = 79)	English (n = 26)	African language (n = 358)	Other languages (n = 9)
Bloekombos Kraaifontein	0% (n = 0)	8% (n = 2)	10% (n = 34)	22% (n = 2)
Gugulethu NY 144	1% (n = 1)	4% (n = 1)	8% (n = 28)	0% (n = 0)
Gugulethu NY 49	0% (n = 0)	0% (n = 0)	4% (n = 15)	0% (n = 0)
Gugulethu NY 82	0% (n = 0)	0% (n = 0)	3% (n = 10)	0% (n = 0)
Khayelitsha Macassar	0% (n = 0)	0% (n = 0)	7% (n = 24)	22% (n = 2)
Khayelitsha Makhaya	1% (n = 1)	8% (n = 2)	6% (n = 20)	0% (n = 0)
Khayelitsha Sector F	0% (n = 0)	0% (n = 0)	2% (n = 8)	0% (n = 0)
Khayelitsha Site B	0% (n = 0)	0% (n = 0)	6% (n = 22)	0% (n = 0)
Langa	0% (n = 0)	8% (n = 2)	22% (n = 77)	22% (n = 2)
Lwandle	0% (n = 0)	4% (n = 1)	6% (n = 21)	0% (n = 0)
Mannenberg	53% (n = 42)	19% (n = 5)	1% (n = 2)	0% (n = 0)
Nyanga	0% (n = 0)	12% (n = 3)	13% (n = 48)	22% (n = 2)
Old Cross roads Nyanga	0% (n = 0)	0% (n = 0)	6% (n = 22)	11% (n = 1)
Phillipi	0% (n = 0)	0% (n = 0)	8% (n = 27)	0% (n = 0)
Tafelsig Mitchells Plain	20% (n = 16)	35% (n = 9)	0% (n = 0)	0% (n = 0)
West Bank	24% (n = 19)	4% (n = 1)	0% (n = 0)	0% (n = 0)

Note: Percentages do not total 100 due to rounding.

APPENDIX F: RECOMMENDATIONS FOR BETTER PARK USAGE

Table F1 Recommendations for better park usage

Recommendations for better park usage	Sources:
Spatial recommendations	
➤ Parks must be accessible, proximate and connected to other parks	Azuma et al. (2006); Burgess, Harrison & Limb (1988); City of Cape Town City Planner's Department (1997); City of Cape Town (2003); Dunnett, Swanwick & Woolley (2002); Gobster (2002); Giles-Corti et al. (2005); Green & Argue (2007); Harnik & Simms (2004); McCormack et al. (2006); Nembudani (1997); Omer & Or (2005); Seeland & Nicole (2006); Spocter (2008); Syme, Fenton & Coakes (2001); Van Herzele & Wiedemann (2003); Walters (2005).
➤ Public transport must be provided to parks if people are not within walking distance to them and do not have their own transportation to get there	Azuma et al. (2006); Geoffrey et al. (2005); Gobster (2002); Hardy (1980); Henderson et al. (2001); Rishbeth (2001); Tierney, Dahl & Chavez (2002).
Governmental and economic recommendations	
➤ Change from supply-led provision – which focuses on the wider public good – to demand-led provision – where the emphasis is on efficient allocation and prioritisation of scarce public resources to meet a limited range of leisure needs	Durban Municipality Environmental Branch Development & Planning Service Unit (1999); Page, Nielsen & Goodenough (1994).
➤ Extra money in park budgets can be used to pay residents of a neighbourhood, who in turn pay people to clean and maintain parks for the community	Tygerburger (2009c); Tygerburger (2009e).
➤ More financial support from sources such as the government, the private sector and NGOs must be obtained. In other words, cooperative governance (public/private governance) is necessary for park management and maintenance	Cranz & Boland (2004); Hansen (2009a); Henderson et al. (2001); International Federation of Parks and Recreation Administration (2006); Jones (2002); Page, Nielsen & Goodenough (1994); Pincetl & Gearin (2005); Sanesi & Chiarello (2006).
➤ Parks must be adaptable and flexible to change	Jansen van Vuuren (2005); Nembudani (1997); Walters (2005).
➤ Release advice booklets on park usage that contain information about park issues and the rules that should be followed in parks	Tygerburger (2009a).
➤ Some articles say entrance fees should not be charged, while others say entrance fees should be charged to ensure community pride in park facilities. This would facilitate placing fences around certain parks with gates to control access	Azuma et al. (2006); Del Saz Salazar & Garcia Menéndez (2007); Dunnett, Swanwick & Woolley (2002); Geoffrey et al. (2005); Harnik & Simms (2004); Page, Nielsen & Goodenough (1994); Pincetl & Gearin (2005).
➤ There should be “transparency and accountability of planners and decision makers”	City of Cape Town (2003: 9).

Continued overleaf

Table F1 continued

Recommendations for better park usage	Sources:
Environmental recommendations	
➤ Environmental education must be provided to people, such as guided tours through parks	Azuma et al. (2006); Cranz & Boland (2004); Henderson et al. (2001); Morris (2003).
➤ “Incorporate natural features into the open-space system to add to the amenity value”	City of Cape Town (2003: 9).
➤ Integrate community parks into the broader open-space system, such as district parks	Hansen (2009a).
➤ Parks must be sustainable. Sustainable parks can be achieved through designing sustainable parks, planting local plants, using correct composting methods, planting indigenous water-wise gardens, making construction less intrusive on the environment and allowing nature to maintain itself. Sustainable development must be achieved through social, economic and environmental means and should include the consolidation, protection and improvement of natural resources (parks)	City of Cape Town (2006); City News (2009); Cranz & Boland (2004). Johannesburg City Parks (2009).
➤ Prohibit development from occurring in parks (balance urban development with park development)	Hardy (1980); Harnik & Simms (2004); Pincetl & Gearin (2005).
➤ Recycle anything that is removed from parks (for example thatches can be used to create paper and wooden park furniture can be used to create other structures)	Hansen (2009c).
➤ Urban land reclamation: derelict sites, such as military bases, landfills, industrial yards and obsolete transportation systems can offer excellent sites for new parks. Plants can be used to extract heavy metals from the earth	City of Cape Town (2003); Cranz & Boland (2004).
Management recommendations	
➤ Better signs should be provided to indicate where parks are located, but signs should also include rules of parks	Henderson et al. (2001); Morris (2003); Pincetl & Gearin (2005); Rishbeth (2001).
➤ Dogs must be removed from parks, or dog laws must be created to separate them from other park users	Dunnett, Swanwick & Woolley (2002); Hansen (2006); Rishbeth (2001); Tygerburger (2009b).
➤ Parks must be better maintained (grass must be mowed, trees and plants must be felled to ensure visibility, shade must be provided under trees, sufficient lighting must be provided and litter and vandalism must be removed from parks on a routine basis)	Dunnett, Swanwick & Woolley (2002); Gobster (2002); Jansen van Vuuren (2005); Johannesburg City Parks (2009); Lindsey, Maraj & Kuan (2001); Lourens (1989a); Lourens (1989b); Nembudani (1997); Soweto parks and recreation facilities (1995); Speller & Ravenscroft (2005); Tucker, Gilliland & Irwin (2007); Tygerburger (2009c); Tygerburger (2009d); Walters (2005).
Aesthetic recommendations	
➤ Create something new in parks on a routine basis to keep people interested in parks	Johannesburg City Parks (2009).

Continued overleaf

Table F1 continued

Recommendations for better park usage	Sources:
Aesthetic recommendations	
<p>➤ Make parks more attractive by planting trees and gardens and providing play equipment, seats and a variety of facilities. Parks must be beautiful and spacious, because fragmentation disrupts space</p>	<p>Azuma et al. (2006); Burgess, Harrison & Limb (1988); Geoffrey et al. (2005); Giles-Corti et al. (2005); Hansen (2009a); International Federation of Parks and Recreation Administration (2006); Pasaogullari & Doratli (2004); Payne, Mowen & Orsega-Smith (2002); Pincetl & Gearin (2005); Van Herzele & Wiedemann (2003); Yilmaz, Zengin & Yildiz (2007).</p>
<p>➤ More hard pathways must be provided to cater for disabled people, the elderly and cyclists</p>	<p>Azuma et al. (2006); City News (2009); Dunnett, Swanwick & Woolley (2002); Henderson et al. (2001); Johannesburg City Parks (2009); Mowen, Payne & Scott (2005); Walters (2005).</p>
<p>➤ Parks should be divided into sections for different activities</p>	<p>International Federation of Parks and Recreation Administration (2006); Mitchell (1995); Walters (2005).</p>
<p>➤ Parks should have age-appropriate play equipment. There should also be a variety of play equipment and park equipment/furniture so that everyone's needs are catered for</p>	<p>Burgess, Harrison & Limb (1988); Cranz & Boland (2004); CSIR (2000); Henderson et al. (2001); Jansen van Vuuren (2005); Let the children play (1997); Lourens (1989a); Mowen, Payne & Scott (2005); Nembudani (1997); Payne, Mowen & Orsega-Smith (2002); Seeland, Dübendorfer & Hansmann (2009); Tucker, Gilliland & Irwin (2007); Walters (2005).</p>
<p>➤ Provide other facilities such as restrooms and cafés that are nearby</p>	<p>Gobster (2002); Page, Nielsen & Goodenough (1994); Rishbeth (2001); Tucker, Gilliland & Irwin (2007).</p>
Social recommendations	
<p>➤ Close streets so that children can play there, if no alternative park space exists</p>	<p>Jansen van Vuuren (2005); Nembudani (1997); Walters (2005).</p>
<p>➤ Form friend groups, which will encourage community involvement and allow people to visit parks regularly</p>	<p>Henderson et al. (2001); Jones (2002); Speller & Ravenscroft (2005); Tygerburger (2009a).</p>
<p>➤ Governments must allow community members to participate in planning and designing parks to ensure that their needs are met</p>	<p>Azuma et al. (2006); Chiesa (2004); Hansen (2009c); Hardy (1980); Hernandez-Bonilla (2008); Jansen van Vuuren (2005); Johannesburg City Parks (2009); Jones (2002); McInroy (2000); Morris (2003); Nembudani (1997); Page, Nielsen & Goodenough (1994); Savasdisara (1988); Seeland, Dübendorfer & Hansmann (2009); Speller & Ravenscroft (2005); Tygerburger (2009d); Tygerburger (2009e); Wall (1992); Walters (2005); Wilson & Steyn (1996).</p>
<p>➤ Integrate different communities and cultures into the use of parks. Children should play interracially. The lack of open space fuels separation along class and race lines, because adults retreat into private spaces</p>	<p>Govender (2009).</p>

Continued overleaf

Table F1 continued

Recommendations for better park usage	Sources:
Social recommendations	
<p>➤ More information on parks should be provided in all languages</p>	<p>Dunnett, Swanwick & Woolley (2002); Henderson et al. (2001); Morris (2003); Mowen, Payne & Scott (2005); Seeland & Nicole (2006).</p>
<p>➤ Parks must give comfort and convenience</p>	<p>City of Cape Town City Planner's Department (1997).</p>
<p>➤ Provide areas where community members can perform their own cultural activities associated with open space usage, such as Latin community gardens. In other words, parks must give a sense of identity and belonging to different park users, otherwise it will not be used</p>	<p>Chiesura (2004); Geoffrey et al. (2005); Jansen van Vuuren (2005); McInroy (2000); Morris (2003); Nembudani (1997); Ravenscroft & Markwell (2000); Rishbeth (2001); Saldivar-Tanaka & Krasny (2004); Seeland & Nicole (2006); Tinsley, Tinsley & Croskeys (2002); Van Herzele & Wiedemann (2003); Walters (2005).</p>
<p>➤ Provide parks that can host more special events, in all official languages, to ensure that more people would use parks. Parks must have multiple uses, such as functioning as greenway systems or as spaces for concerts.</p> <p>An example of multifunctional park spaces is to create more PlayPump Water Systems in the City of Cape Town. A retail supermarket helps with funding and maintenance of the systems. The PlayPump Water System is a roundabout that generates borehole water as the children play on it. This innovative concept does not just provide water to poor communities through taps, but also creates places where children can play in park-like areas. It furthermore provides employment for the designers and the borehole tanks are used as places for important community advertisements.</p> <p>Another example is to provide township televisions in public open spaces where strict rules apply with full-time managers. It will increase the use of public open spaces and lead to less crime that is committed, because children are off the streets</p>	<p>Bosman (2009); Die Burger (2009); Del Saz Salazar & Garcia Menéndez (2007); Dunnett, Swanwick & Woolley (2002); Hansen (2006); International Federation of Parks and Recreation Administration (2006); Mowen, Payne & Scott (2005); Page, Nielsen & Goodenough (1994); Pincetl & Gearin (2005); Rishbeth (2001); Sanesi & Chiarello (2006); Speller & Ravenscroft (2005); Welch (1990).</p>
<p>➤ Reduce overcrowding in parks</p>	<p>Geoffrey et al. (2005).</p>
<p>➤ Social injustice and imbalances of the past must be addressed to achieve equality of opportunity (everyone must have access to quality open spaces)</p>	<p>City of Cape Town City Planner's Department (1997); City of Cape Town (2003); City of Cape Town (2006/7).</p>
<p>➤ Use school grounds as an extra possibility to provide open space. Schools may also be used as a means to distribute information to learners and their parents about parks</p>	<p>Harnik & Simms (2004); Henderson et al. (2001); Jansen van Vuuren (2005); Nembudani (1997); Walters (2005).</p>

Continued overleaf

Table F1 continued

Recommendations for better park usage	Sources:
Safety and security recommendations	
<p>➤ Bad elements such as squatters, homeless people, drunks, drug users, gangs, crime, litter, dog litter and vandalism must be removed from parks. The result is that parks will be safer</p>	<p>Burgess, Harrison & Limb (1988); Geoffrey et al. (2005); Gobster (2002); Hansen (2009b); Madge (1997); Mitchell (1995); Mowen, Payne & Scott (2005); Nembudani (1997); Pincetl & Gearin (2005); Soweto parks and recreation facilities (1995); Tygerburger (2009c); Walters (2005).</p>
<p>➤ Increase surveillance and safety through the following: permanent adult presence, park patrols by people in the neighbourhood, community immediately overlooking parks must keep an eye on the parks, increase visitor numbers – resulting in a sense of responsibility people would have over their parks and community enforcement (community punishment). Police visibility can also increase in parks. Parks can also be locked, if already fenced, at certain times of the day, for example mostly at night</p>	<p>Burgess, Harrison & Limb (1988); Dunnett, Swanwick & Woolley (2002); Gobster (2002); Jansen van Vuuren (2005); Jones (2002); Lindsey, Maraj & Kuan (2006); Mowen, Payne & Scott (2005); Nembudani (1997); Page, Nielsen & Goodenough (1994); Sanesi & Chiarello (2006); Walters (2005).</p>