The development of a universal accessibility framework for National Parks in South Africa and Zimbabwe

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M.Com Marketing strategy

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DECLARATION WITH REGARD TO INDEPENDENT WORK

I, Oliver Chikuta, identity number 49-081888C49 (Passport no. DN213529) and Student No. 24110582,do hereby declare that this research submitted to the North-West University, for the PhD in Tourism Management: The development of a universal accessibility framework for National Parks in South Africa and Zimbabwe, is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the North-West University and has not been submitted before to any institution by myself or any other person in fulfillment (or partial fulfillment) of the requirements for the attainment of any qualification. The study was also submitted to turnitin, and complies with the prescribed guidelines in terms of similarity index.

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ABSTRACT

Despite global growth in the disability tourism market, tourism organisations have not realised the full potential of this market due to a lack of understanding of this market segment as well as the perception that PwDs do not travel. Most facilities remain inaccessible to people with both permanent and temporary impairments. Disability movements (like the American Association of People with Disabilities, Aspies for Freedom and Handicap International) have raised their voices but not loud enough to stir action. Workshops, seminars and conferences have been held but most were talk shows with no practical implications. To date, no research-based universal accessibility framework exists for national parks in South Africa and Zimbabwe and no practical standards have been formulated to ensure accessibility to all in these parks.

This study aimed to design a universal accessibility framework for national parks in South Africa and Zimbabwe. To achieve this goal one of the study's objectives was a literature review on universal accessibility and tourism. This objective is achieved in Chapter 2. The second objective was to establish the extent to which national parks in South Africa and Zimbabwe are universally accessible. Interviews were conducted with park management in both countries to meet this objective. The study also sought to establish the accessibility expectations of people with disabilities; this was attained by administering a 10-page online questionnaire to people with disabilities from across the globe. Finally, the study aimed to formulate a set of recommendations and develop a framework for universal accessibility.

Using SPSS, Exploratory Factor Analysis and ANOVAs were performed in order to analyse and interpret data. Descriptive statistics were also used. The Alpha values and mean inter-item correlations confirmed the reliability and internal consistency of the data. Eleven factors were identified from the factor analysis: transport; parking and entrance; the reception area; restrooms; bird watching and game drives; trails; information accessibility; interpretation; water-based activities; accommodation and dining as well as campsites. The results revealed that while people with disabilities want all areas to be accessible, specific facilities were singled out in line with particular disabilities. People with mobility impairments were more worried about transport and parking than people with other impairments. They were also concerned about the accessibility of bird watching and game viewing as well as accommodation and dining than were people with hearing and visual impairments. People with hearing impairments placed much high value on the accessibility of the reception area than those with mobility and visual impairments.

Interesting to note was the fact that people with visual impairments did not regard accessible restrooms as very important. Most importantly, all people with disabilities were strongly against steps and staircases in all facilities since they are a serious barrier to accessibility regardless of type of disability. They also attach more value to how they are treated when they visit national parks. This was identified as more important than physical access.

A universal accessibility framework was developed based on the literature and research findings. This framework will go a long way in assisting policy makers to address accessibility issues in national parks and the tourism sector in general.

Keywords: *Disability, impairments, universal accessibility, national parks, nature-based tourism, universal design, framework, SANParks, ZimParks.*

OPSOMMING

Ten spyte van wêreldwye groei in die toerismemark vir gestremdes het toerisme-organisasies nog nie daarin geslaag om hierdie mark se volle potensiaal te realiseer nie. Meeste fasiliteite is steeds ontoeganklik vir mense met beide permanente en tydelike gebreke. Gestremdheidsbewegings het al van hulle laat hoor, maar nog nie genoeg is gesê om tot aksie oor te gaan nie. Werkswinkels, seminare en konferensies is al gehou, maar met geen praktiese implikasies nie. Tot op hede bestaan geen navorsingsgebaseerde universele toeganklikheidsraamwerk vir nasionale parke nie, en geen praktiese standaarde is geformuleer om toeganklikheid tot al hierdie parke te verseker nie.

Hierdie studie het gepoog om 'n universele toeganklikheidsraamwerk vir nasionale parke in Suid-Afrika en Zimbabwe te ontwerp. Om hierdie doelwit te bereik was een van die studie se doelstellings 'n literatuuroorsig oor universele toeganklikheid en toerisme. Hierdie doelwit is in Hoofstuk 2 bereik. Die tweede doelwit was om die mate waartoe nasionale parke in Suid-Afrika en Zimbabwe universeel toeganklik is, te bepaal. Onderhoude is gevoer met parkbestuur in beide lande om hierdie doelwit te bereik. Die studie het ook gepoog om te bepaal wat die toeganklikheidsverwagtinge van mense met gestremdhede is; dit is behaal deur 'n 10 bladsy-aanlynvraelys aan 210 mense met gestremdhede regoor die wêreld te stuur. Laastens het die studie gepoog om aanbevelings te formuleer en om 'n raamwerk vir universele toeganklikheid te ontwikkel.

SPSS, beskrywende statistiek, verkennende faktoranalise en ANOVA's is gebruik om die data te analiseer in te interpreteer. Die alfa-waardes en gemiddelde inter-itemkorrelasies het die betroubaarheid en interne konsekwentheid van die data bevestig. Elf faktore is geïdentifiseer vanuit die faktor-analise: vervoer, parkering en toegang, die ontvangsarea, ablusiefasiliteite, voëlkyk- en wildritfasiliteite, staproetes, inligtingtoeganklikheid, interpretasie, watergebaseerde aktiwiteite, akkommodasie en uiteet sowel as kampterreine. Die resultate onthul dat terwyl mense met gestremdhede wil hê dat alle areas toeganklik is, spesifieke fasiliteite uitgesonder moet word vir spesifieke gestremdhede. Mense met gestremdhede verwant aan mobiliteit was meer bekommerd oor vervoer en parkering as mense met ander gestremdhede. Hulle was ook bekommerd oor die toeganklikheid van voël- en wildkyk sowel as akkommodasie en uiteet as

mense met gehoor- en visuele gestremdhede. Mense met gehoorgestremdhede het meer waarde op die toeganklikheid van die ontvangsarea geplaas as mense met gestremdhede wat verband hou met sig en mobiliteit. Interessant om van kennis te neem is die feit dat mense met visuele gestremdhede toeganklike ablusiefasiliteite nie as baie belangrik geag het nie. Die belangrikste is dat mense met gestremdhede gekant is teen trappe en in alle fasiliteite aangesien dit as hindernis gesien word deur alle persone met gestremdhede. Hulle heg baie waarde aan hoe hulle behandel word wanneer hulle nasionale parke besoek. Hierdie is geïdentifiseer as belangriker as fisiese toegang.

'n Universele toeganklikheidsraamwerk is ontwikkel gebaseer op die literatuur en navorsingsresultate. Hierdie raamwerk sal ver gaan ten opsigte van bystand aan beleidsmakers wanneer toeganklikheidskwessies in nasionale parke en die toerismesektor oor die algemeen aangespreek word.

Sleutelwoorde: *Gestremdheid, gebreke, universele toeganklikheid, nasionale parke, natuurgebaseerde toerisme, universele ontwerp, raamwerk, SANParke, ZimParks*

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ABBREVIATIONS AND ACRONYMS

ADA	Americans with Disabilities Act
ANOVA	Analysis of variances
DDA	Disability Discrimination Act
DO	Disability Organisations
DPA	Disabled Persons Act
ENAT	European Network for Accessible Tourism
KMO	Kaiser-Meier-Olkin
PwDs	People with disabilities
SANParks	South Africa National Parks
UNCRPR	United Nations Convention on the Rights of Persons with Disabilities
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WHO	World Health Organisation
ZimParks	Zimbabwe Parks and Wildlife Management Authorities
ZTA	Zimbabwe Tourism Authority

CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

Access to tourism and recreation is a constitutional right as prescribed in the United Nations Convention on the Rights of Persons with Disabilities (UN, 2006:77). Like anybody else in society, people with disabilities (PwDs) are entitled to entertainment, recreation and tourism, among other things. Prevailing western social norms and values recognise travel and recreation as a right (Yates, 2007:34) and tourism's contribution to the well-being of the disabled is well known in the developed world (Yau, McKercher & Packer, 2004:947). Therefore, recent studies have suggested that travel companies have a social responsibility to meet the needs of the disabled (Kinney & Coyle, 1992:7; Prost, 1992). Unfortunately, PwDs suffer discrimination, segregation and different forms of social exclusion in many countries (Darcy, 1998:68; Bi, Card, & Cole, 2007:205; Burnett & Bender-Baker, 2001:14).

Providing opportunities and access to PwDs is not merely an ethical issue, but a business opportunity for tourism operators as well as other sectors (United Nations, 2009:3; APEC, 2003:1). The social model of disability argues that PwDs do not want to be treated as recipients of charity but as equals with the so called able-bodied; thus they are willing to pay as much for their holidays as their able bodied counterparts (Oliver, 1996:21). Furthermore, PwDs are not the weaker species, who should engage in more docile and passive tourism; they are also interested in challenging forms of tourism, especially outdoor adventure. According to Zeller (2008:15) and Jaquette (2005:9), PwDs feel much more satisfied when they visit natural areas and at times engage in more challenging wilderness activities than the able-bodied. This supports the notion that it makes business sense to make tourism accessible to PwDs.

In light of the on-going global economic downturn, tourism destinations need to 'think outside the box' to attract niche markets. One such market is that of PwDs (Eichhorn & Buhalis, 2007). Furthermore, the fact that nature-based tourism is the primary market in Southern Africa means that neglecting PwDs could be ignoring a potentially sustainable niche market for future competitive advantage. Despite the growing disability market, most countries (especially

developing countries) and tourism service providers have not yet recognised the importance of this market.

This chapter presents the background to the study, the problem statement, and the study's goal and objectives. The methodology and data analysis are also briefly discussed and important concepts are explored. The chapter ends by outlining the structure of the thesis.

1.2 BACKGROUND TO THE STUDY

Disability tourism, also known as accessible tourism, is a philosophy that endeavours to ensure that tourism destinations, products and services are accessible to all people, regardless of physical limitations, age or disabilities (Darcy & Dickson, 2009;34). It enables individuals with mobility and other challenges to access destinations without much aid and with dignity by ensuring that products, services and environments are designed to meet their needs. This includes those travelling with children in prams, PwDs and seniors (Pegg & Patterson, 2011:174). It encompasses all dimensions of disability, including sensory, mobility and vision, among others (World Health Organisation, 2002; Oliver, 1996:9).

1.2.1 Universal accessibility

The concept of universal access is inseparable from accessible tourism. According to the United Nations Convention on the Rights of Persons with Disabilities, Article 2; universal access refers to the design of products, environments, programmes and services that are usable by anyone to the greatest extent without the need for adaptation or specialised design (UN, 2006). The definition emphasises the need to ensure that anyone, regardless of ability, age, size and gender is able to use the facility independently and with ease (Parks & Benefits, 2007:4). Connell, Jones, Mace, Mueller, Mullick, Ostroff, Stanford, Steinfeld, Story & Vanderheiden, (2008:2-10) identified the following seven principles of universal design for the National Center on Accessibility (USA):

- Equitable use - useful to all people despite disabilities.
- Flexibility in use - should accommodate a wide range of individual preferences and abilities.

- Simple and intuitive use – the design is easy to understand regardless of a user's situation.
- Perceptible information - communicates information effectively to users regardless of the type of impairment.
- Tolerance of error - minimises hazards and adverse consequences of accidents or unintended actions.
- Low physical effort - the design can be used efficiently and comfortably, with minimum fatigue.
- Size and space for approach and use - appropriate size and space for use regardless of the user's body size and mobility.

The following section offers insight into the relationship between age and disability.

1.2.2 Disability and aging

No discussion on disability and accessibility is complete without examining the issue of aging. Worldwide, the number of PwDs has increased in recent years, mainly as a result of ageing and other health related factors (Darcy, 2002:137; Turco, Stumbo & Garncarz,1998; Yau *et al*., 2004:948). Research has shown that there is a positive correlation between ageing and disability (WHO, 2007). However, Mann (2005:6) argues that older persons with impairments may not necessarily be disabled if they find ways of compensating for that impairment. In most cases, however, the majority of old people are unable to do so, thus becoming disabled. The number of aged people is expected to increase tremendously by 2050 and the greatest increase is expected in developing countries, especially in Asia. This is attributed to the improvement in the general standard of living in these countries. In 2005, 16.7% of Americans were 60 years and older and by 2050, the number is expected to increase to around 26%. In 2005, people aged 60 and older represented 10.9% of China's population; this is expected to rise to 31% by 2050. Germany and Japan are expected to register the largest growth from 25.1% and 26.3% to 35% and 41, 7%, respectively (Eurostat, 2005:254; Dobriansky, 2007:5). These patterns show how important disability tourism is and is likely to become in the future.

1.2.3 Economic significance of the disability market

The number of PwDs worldwide is estimated to be between 600 and 859 million (APEC, 2003:5; United Nations, 2009). This represents a significant 10% to 19% of the global population (Bull, House & Weed, 2003:14; Huh & Singh, 2007:212). These patterns are reflected in national statistics. For instance, in 1997, the US Census Bureau reported that 21% of the population was disabled amounting to approximately 54 million people (US Department of Commerce, 1997).

It is therefore clear that the disabled have become a significant consumer market (Darcy *et al*., 2010:817; Buhalis, Michopoulou, Eichhorn, & Miller, 2005; Darcy, 2002:61). Lipp and Van Horn (2007:3) found that American adults with disabilities spend an average of $13, 6 billion US on tourism each year. This research further revealed that these people made 32 million trips in 2002 and spent $4, 2 billion on hotels, $3, 3 billion on airline tickets and $2, 7 billion on food and beverages while they were travelling (Harris Interactive Research, 2005). Parker *et al.* (2002:283), Rains (2007:2) and the UNESCAP (2007) emphasise that creating accessible tourist destinations is not about charity but serious economic gains.

The same study found that, in the UK, 10 million adults with disabilities spend approximately 80 billion pounds on tourism per year and in Canada, economically active disabled people spend 25 billion Canadian dollars on travel (Lipp & Laurel, 2007:3). Dwyer and Darcy's (2011:228) study revealed that overall expenditure by tourists with disabilities in the United Kingdom from 2003 to 2004 was close to US$12 billion. This is massive expenditure and sufficient reason to take disability tourism seriously. The Commonwealth Department of Industry, Tourism and Resources (CDITR, 2003:45) has identified the disabled and the senior population as an emerging market which can sustain the tourism industry. Tourism Australia has responded by establishing disability tourism as a niche (Tourism Australia, 2005:4)

In the East and South Asia Pacific (ESCAP) region, PwDs and older people are a growing group of consumers of travel, sport, and other leisure-oriented products and services (ESCAP, 2000:75-76). Aged people's share of tourism in developed countries has increased with 'baby boomers' coming of age and representing a very lucrative market for travel and tourism. The developing world is following suit as health facilities and medication improve (ESCAP, 2000).

The United Nations (UN) projects that by 2025, about 14% of the ESCAP region's total population will be over the age of 60 and the region is expected to be home to more than 50% of the world's aged population. By 2041, about 23% of Canadians will also be over 65 (Horgan-Jones & Ringaert, 2004:6).

Studies have revealed very important characteristics of tourists with disabilities. People with disabilities stay longer at a destination than their able-bodied counterparts; they spend more money per day and usually demand more services. Another important attribute of this growing market is that they travel out of season to avoid crowds (Burnett & Bender-Baker, 2001:6; Denman & Clerkson, 1991:B46; Ray & Ryder, 2003:63, Van Hon, 2001). This is particularly important when one considers the fact that the tourism and hospitality industry is highly seasonal and that patronage during the off-season is a 'blessing'. Moreover, once one captures this niche, it is likely that friends, family members and associates of tourists with disabilities will also be captured (Buhalis & Darcy, 2011:6).

Many PwDs not only have the will but the disposable income to travel (Australian Hotel Association, 1998:2; Bennet & Bender-Baker, 2011:6; Darcy, 2000:12, 2002, 2008). While it is assumed that the situation in Europe and America applies to all parts of the world, there are variations in economic, socio-cultural and legal frameworks. In this regard, southern Africa needs tailor-made policy frameworks for sustainability. The following questions remain unanswered: are there enough facilities to enable PwDs to travel? Do these facilities meet the expectations of tourists with disabilities? How can Southern Africa become an accessible destination?

1.2.4 People with disabilities and nature-based tourism

Like any other tourist segment, PwDs are greatly interested in exploring nature (Lais, McAvoy & Frederickson, 1992:10). Research has shown that PwDs participate in nature-based tourism and engage in activities such as sightseeing, bird-watching, camping and hunting (among others) (McAvoy, Holman, Goldenberg & Klenosky, 2006:24; Cordell, 1999, McCormick, 2001:12). Indeed, McCormick's research shows that PwDs' level of participation in outdoor recreation in the US equals, and at times, exceeds that of able-bodied tourists. Some tourists with disabilities engage in more challenging activities than their able-bodied counterparts

(Anderson, Schleien, McAvoy, Lais & Seligmann, 1997:214). This demonstrates that PwDs are by no means spectators when it comes to nature-based tourism.

The motivation for visiting natural areas has been found to be the same regardless of whether one is able-bodied or disabled (Yau *et al*., 2004:947, Lais, 1995; Roggenbuck & Driver, 2000:25; Brown *et al.*, 1999:210). This includes escaping the day to day mundane environment, relaxation, enhancing family interactions, experiencing natural beauty and taking photographs, among others (Shi, 2006; Singer & McAvoy, 1992; Saayman, Van der Merwe & Slabbert, 2009). However, PwDs also have other motivations. The most commonly noted reasons for visiting a wilderness environment include the need to experience personal challenges, to increase self-confidence, social adjustment and family satisfaction and to enhance self-understanding (Anderson *et al*., 1997:220; McAvoy *et al.,* 1989; Singer & McAvoy, 1992). Shi *et al*. (2012:229) identified a further reason why PwDs visit various areas of interest, including natural areas. The 'do it today' syndrome reflects the fact that tourists with disabilities are not sure of what tomorrow holds, so they decide to enjoy the best of today. This is vindicated by the fact their impairments are likely to worsen with age.

Despite the fact that PwDs are interested in nature-based tourism, the number of disabled visitors to national parks worldwide has not been significant (UNCRPD, 2006). This is despite the statutory instruments put in place by some governments to encourage disability tourism. In 1994, only 2.3% of park users in the US were mobility disabled; 14.4% of the US population was mobility impaired at that time (Bricker, 1995:11; Lais, 1992). This may be an indication of the inaccessibility of national parks in that country, which could also be the case in Zimbabwe and South Africa.

The major debate on the accessibility of natural areas has been how to strike a balance between enhancing accessibility and preserving the natural state of the wilderness environment (Ray & Ryder, 2003:57; Lovelock, 2010:358; Jaquette, 2005). The use of cars and electrical devices to enhance access (industrial tourism) has been regarded as a threat to national parks and the wilderness experience. It makes access to nature too easy (Bricker, 1995) and is environmentally damaging.

The question is: how can access be enhanced while keeping the national parks attractive? Advocates of environmental sustainability have argued that any change in the ecological set-up to accommodate the mobility impaired compromises the quality of the very nature that draws these tourists (Zeller, 2008:15; Jaquette, 2005, Lais, 1992). On the other hand, those that

subscribe to the philosophy of universal access argue that it is an infringement of the rights of PwDs to deny them access to these natural areas on the bases of sustainability (Lovelock, 2010:358). They argue that, motorised access to national parks must be allowed to cater for the mobility impaired and the aged (Lais, 1995:27).

Environmentalists have argued that motorized access would deny everyone (including the disabled) a true wilderness experience (Bricker, 1995). However tourists with mobility impairments state that they do not necessarily want to make natural areas too easy to access. All they want is for these parks to be universally accessible to afford them the experience and challenges that able-bodied persons are able to experience (Zeller, 2008:17). What they are against is the total inaccessibility of these places which is tantamount to exclusion. Environmentalists seem to put unwarranted emphasis on the exclusion of motorised/mechanised devices like wheelchairs in the parks. The Americans with Disabilities Act title V, Section 507c provides for the use of the wheelchair for individuals whose disabilities require their use (ADA, 1990). It is argued that a wheelchair does not involve the motorisation of national parks; rather, it is somebody's footwear and should be allowed in parks just as others' shoes are. (Zeller 2008:17). Jaquette (2005:2) observes that making parks more accessible would not necessarily make them more visibly constructed.

A few studies have been conducted to determine tourists' perceptions of motorized access to natural environments (Zeller, 2008; Lovelock, 2010). The results of these surveys show that it is in the interests of both the able-bodied and the disabled to ensure that the pristine nature of wilderness areas remains untainted by modernity. While some mobility impaired tourists supported enhanced motorised access, the majority were not are favour of this option. It is however clear than all people with disabilities require an accessible natural environment.

Access to tourist areas by PwDs has been cause for concern and, of late, researchers have investigated ways of making these areas more accessible (Lais, 1995; Jaquette, 2005; Lovelock, 2010:357). However, there is a paucity of research on the accessibility of national parks, among other natural areas (McAvoy *et al*., 2006:30; Lovelock, 2010:360). Indeed, PwDs have been referred to as 'outsiders' when it comes to national parks for the simple reason that these environments have been deemed unsuitable for them (Matthew & Vujakovic, 1995). Some managers of remote areas do not accommodate disability because of the costs involved. They are reluctant to invest in this emerging market and therefore relegate PwDs to the periphery of their markets (Lovelock, 2010).

This review has revealed that PwDs are an emerging and potentially viable market segment for nature-based tourism. The problem is therefore not whether PwDs want to engage in nature-based tourism but rather accessibility. In fact, denial of access to natural environments makes contact with nature even more precious (McAvoy, 2006:31).

1.2.5 Research on disability and tourism

Research on tourism and disabilities can be classified into a number of categories. The first is to do with legislation. National governments' increased interest in issues to do with PwDs and the enactment of legislation such as the Americans with their Disabilities Act (ADA) of 1990 and the Disability Discrimination Act (DDA) of 1995 which have contributed to an increase in research on disability (Darcy, 2010:5). Much research has been conducted globally on disability legislation and ensuring that the civil and legal rights of PwDs are protected (O'Neill & Ali Knight, 2000:1; Boyne, 2005). Other researchers examined the impact of the ADA, DDA and other legislation on the hospitality and tourism industry (Ohlin, 1993, Forbes, 2009, Rosen 2007, Shaw, *et al.*, 2005). This research was supply-side driven and little attention has been paid to the demand side (Darcy, 2010; Snyman, 2000).

The second category of research focused on the human resource aspects of disability, focusing on the employment of PwDs in the hospitality and tourism industry as well as staff attitudes towards tourists with disabilities (Gröschl, 2007, Darcy, 2010, Darcy & Peg, 2011). Ross (2004) drew attention to ethical issues and how employees with various impairments are treated within the tourism and hospitality industries. Again, this category is supply side driven.

Some studies focused on models and dimensions of disability while others raised the contentious issue of universal access and universal design (Connell *el al.,* 2008, United Nations, 2006, Centre for Universal Design, 2009; Rains, 2004:23). Studies conducted in Australia, the United States of America and parts of Europe examined the economics of disability tourism in order to determine the viability of this up and coming market (Darcy, 1998; Harris Interactive Research, 2005). Wilderness tourism has also been a subject of discussion and research in the academic arena although little emphasis has been placed on PwDs (Zeller 2008:16; Jaquette 2006:8; MacAvoy *et al*., 2005; Lais 1996).

Despite the fact that there has been a significant increase in the literature on accessible tourism, this subject is still evolving in academic study and in industry practice (Buhalis & Darcy, 2011). Furthermore, studies on disability have focused on Europe, the USA and Australia (Grady & Ohlin, 2009; Ozturk, Yayli & Yesi Ltas, 2008). The primary concern has been what other people think of PwDs; very limited information is available on disabled people's perspectives of tourism products, particularly in nature-based tourism (Snyman, 2002; Mckercher & Chan, 2005:4). Therefore this study takes a two-pronged approach in examining both the demand and supply side in order to come up with a balanced framework for universal accessibility, particularly in national parks.

It is evident from the literature reviewed that while disability tourism has been a subject of concern in countries like Australia, the USA and parts of Asia, very little research has been done in this area in Africa, particularly Southern Africa. It is this knowledge gap which the current study sought to bridge.

1.3 PROBLEM STATEMENT

It is evident that PwDs and the aged are a growing market for nature-based tourism (MacAvoy *et al.,* 2006:23; Zeller, 2008:15) and that the potential contribution of this market to tourism and national economies is enormous (Darcy, 1998:2). The fact that nature-based tourism (particularly national parks) is Southern Africa's major tourist draw card due to its natural endowments underlines the importance of this market (Snyman, 2000). Among Southern African countries, South Africa and Zimbabwe have the richest endowment of flora and fauna, and are home to some of the largest and most renowned national parks such as Kruger National Park and Hwange national Park. These countries could be losing numerous potential tourists due to lack of efforts to make these destinations more universally accessible. Although South African National Parks have guidelines, protocols and products that cater for the disabled, the implementation of these policies often relies on the discretion of park managers and is not uniform across the different parks. In most cases products cater for only one or two disabilities. This study therefore makes a significant contribution to product development with the disabled tourist in mind. The following research questions were formulated:

I. How universally accessible are national parks in South Africa and Zimbabwe?
II. What are the accessibility expectations of tourists with disabilities for national parks?
III. What are the views of park management on making the parks universally accessible?

1.4 GOAL OF THE STUDY

1.4.1 Goal

To develop a universal accessibility framework for national parks in South Africa and Zimbabwe.

1.4.2 Objectives

The goal led to the following objectives:

Objective 1

To analyse literature concerning universal accessibility in tourism with specific reference to research in national parks or nature based products.

Objective 2

To establish the extent to which national parks in South Africa and Zimbabwe are universally accessible.

Objective 3

To collect data on the accessibility expectations of tourist with disabilities and the views of park management on the universal accessibility of Zimbabwe and South Africa's National Parks.

Objective 4

To draw conclusions and make recommendations on universal accessibility and to develop a framework that could be used to enhance accessibility in national parks.

1.5 METHOD OF RESEARCH

The following research methodology was adopted in this study:

1.5.1 Literature review

Related literature was analysed in order to identify existing concepts, strategies and models that relate to universal accessibility in general and access to nature-based tourism in particular. The key words in the literature search included universal accessibility, national parks, nature-based tourism, universal design and people with disabilities (PwDs). The study made use of the following resources, among others:

- Journal articles from journals such as Annals of Tourism Research, Tourism Management, Journal of Sustainable Tourism, Journal of Environmental Studies, Outdoor Recreation and Persons with Disabilities.
- Books on accessible tourism, best practices in accessible tourism, and critical debates on tourism.
- Research databases such as Ebscohost, Emerald Insight, Science Direct, and ebrary.
- Public media, both print and electronic.
- SANParks and ZimParks documents and websites.

1.5.2 Empirical survey

This section describes the research design and sampling method and procedures, as well as the data collection instruments.

1.5.2.1 Research design and data collection method

This research was descriptive in the sense that the researcher wanted to obtain a deeper understanding of the perceptions of tourists with disabilities as well as park management regarding the universal accessibility of Zimbabwe and South Africa's National Parks. The research was two-pronged in that it examined both the demand side and supply side of tourism. It sought to establish what tourists with disabilities regard as accessible rather than relying on the definitions of architects and technocrats. The study is unique in the sense that it also considered the views of national parks management regarding universal accessibility. A mixed method approach was adopted in this study where both qualitative and quantitative means were applied to achieve the study objectives. A self- administered questionnaire, in-depth interviews, panel discussions, and website and document analysis as well as personal observations were

used to gather data for this study. The questionnaire was both electronic and manual in order to carter for online and physically present respondents.

1.5.2.2 Sampling

In order to come up with an acceptable and beneficial accessibility framework, this study examined both the demand and supply side of accessible tourism. On the demand side, it sought to establish the accessibility expectations of PwDs when (or if) they visit natural areas in general and national parks in particular. A quantitative survey was employed. As noted earlier, the idea was to ensure that people are involved when policy frameworks that affect them are developed. This is in line with the universal motto of disability organisations; "Nothing for us without us" (National Council for People with Physical Disabilities, 2014). This avoids a situation where disability needs are determined by people whose agenda has nothing to do with PwDs.

Due to the fact that the population was not known, a non-probability sampling approach was adopted for this study. Emails were sent to organisations that deal with PwDs in Zimbabwe (N=10), South Africa (N=12) and internationally (N=4) requesting permission for their members to participate in the survey. Priority was given to organisations that represent people with mobility, hearing and visual disabilities since these are the most visible types of disabilities, and the most easily identifiable. Of the 26 emails sent, only 12 organisations (Zimbabwe N=3, South Africa N=6, International N=3) responded positively and promised to email the online questionnaire to members of their organisation as well as to post it on their websites.

In order to complement the efforts of the identified disability organisations, the researcher searched for online forums where PwDs exchange ideas and experiences. Five international disability forums were found on Facebook: (i) Disabled People's Movement, (ii) Wheelchair users Group (iii) ENAT Accessibility group (iv) "I thank God for my handicaps, for through them, I have found myself" and (v) Spinal Cord.

It was very difficult to establish the total number that would constitute a sample since the actual population was not known. Available statistics show that people with disabilities constitute about 10%-19% of the world population (Bull *et al*., 2003:14; Huh & Singh, 2007:212). This can be translated to about 600million to 859million people (APEC, 2003:5; United Nations, 2009). The

sample was then based on the guidelines set by Krejcie and Morgan (1970:608) and the work of Marpsata and Razafindratsimab (2010:4) and Shaghaghi, Bophal and Sheikh (2011).

Krejcie and Morgan recommended a sample size of 384 for a population of 1000 000 or more, while Marpsata and Razafindratsimab talked about the hard-to-reach population. According to Marpsata and Razafindratsimab (2010:4) and Shaghaghi *et al*. (2011), hard-to-reach populations include people who feel they are disconnected from the mainstream society and those living in disadvantaged social and economic situations. Marpsata and Razafindratsimab (2010:4) further argue that the hard-to-reach populations also include those who might not be very comfortable to open up their condition to the public and others whose cases are a little sensitive and emotional. Persons with disabilities, in one way or another, fit into any of these categories (Jones & Newburn, 2001:5; Chitima, 2013:16). These people may avoid participating in surveys because of the social pressure they feel from other members of the broader community (Duncan, White & Nicholson, 2005). For such, there is no given sample size (Crosby, 2010:14).

The study intended to reach the 384 respondent mark since the population was more than one million but due to the fact that this population was hard-to-reach, 210 questionnaires were received by the end of the survey. This number is acceptable based on the fact that people with disabilities are a hard-to-reach population (Marpsata & Razafindratsimab, 2010:4; Chitura, 2012:16; Shaghaghi *et al*. (2011). Further, according to Gitonga, Ndirangu and Githeko (2013:17) and Kline (1994), for quantitative studies, the acceptable minimum sample size is 100 units, especially where factor analysis is to be used. Based on these authors, the 210 responses are acceptable.

On the qualitative side, purposive sampling was used to select representatives of disability organisations to participate in a panel discussion while convenience sampling was used to select parents of children with disabilities who participated in the study. The key informant technique was used to select respondents from the SANParks and ZimParks (supply side). Chapter four explains the sampling procedure in detail.

1.5.2.3 Development of questionnaire

Building on and adding to the Scandic Accessibility Standard for hotels and the Parks and Benefits (2007) initiative (see chapter 3), and a further literature review, a 10-page questionnaire was developed to solicit the views and perceptions of tourists with disabilities on the accessibility of Zimbabwe and South Africa's national parks. The Scandic questionnaire was designed for hotel accessibility and is thus not fully applicable to parks since accommodation is a very important element of a visitor's experience in a national park. The standard provided important clues and guidelines to developing the questionnaire for parks accessibility. Parks and Benefits came up with a master guide for accessibility of the Baltic Sea region and was a significant input in developing the questionnaire.

The questionnaire had three sections. Section A focused on respondents' demographics, while Section B dealt with travel motivations of PwDs. Section C solicited the accessibility expectations of PwDs. In Section C, a Likert scale with values from 1 to 5 was used to determine the importance of an accessibility item of the national parks. Value 1 represented *not important at all* while 5 was *extremely important*. The respondents were expected to rate the 108 items in terms of their importance to them. In order to be systematic and logical, the 108 items were categorised into 14 areas which covered the whole national park from the entrance to the guest bedrooms. Items 1 to 27 dealt mainly with transport to the national park, parking, entrance to the reception and the reception area itself. Items 28 to 70 examined getting around the national park in terms of trails, bridges, water based activities, bird watching (avitourism) and game viewing facilities, and guiding services as well as tourists' independence in the park. Items 71 to 108 covered restrooms, bedrooms, dining areas, bathrooms and camping sites. All aspects of the national parks were covered as much as possible.

1.5.2.4 Data Analysis

Exploratory factor analysis and ANOVAs were conducted for this study. Four factor analyses were conducted due to the large number of variables/items under consideration. The first three were for accessibility expectations of PwDs while the fourth was for motivation for travel. A one-way ANOVA was performed for accessibility expectations and motivation for travel, respectively. The Spearman's rank order coefficiencies were calculated for the ordinal demographics. In order to ensure the reliability of the data, Cronbach's Alphas and Mean Inter-item correlations

were calculated. Qualitative data was analysed using the open code technique and Cresswell's six steps of analysing and interpreting data (Cresswell, 2009:185-189).

1.6 DEFINING THE CONCEPTS

The following concepts are important in this study:

1.6.1 Disability

This refers to "the disadvantage or restriction of activity caused by contemporary organizations which takes no or little account of people who have physical impairments and thus excludes them from the mainstream of social activities" (Buhalis, 2005:9).

The World Health Organisation (WHO) defines disability as an umbrella term which embraces impairments, activity limitations and participation restrictions. It is not just a health problem, but reflects the interaction of a person's body and those of the society in which they live (WHO, 2014).

1.6.2 Universal Access

According to the United Nations Convention on the Rights of Persons with Disabilities, Article 2, universal access is the design of products, environments, programs and services to be usable by anyone to the greatest extent without the need for adaptation or specialized design (UN, 2006).

1.6.3 Universal Design

The term 'universal design' was coined by the architect Ronald L. Mace to describe the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life (Mace *et al*., 1991:4). However, Selwyn Goldsmith (1963), author of *Designing for the Disabled*, pioneered the concept of free access for disabled people. His most significant achievement was the

creation of the dropped curb - now a standard feature of the built environment (see 2.2.4 for more information).

1.6.3 Nature-based tourism

In its broadest sense, nature-based tourism involves experiencing natural places, typically through outdoor activities that are sustainable in terms of their impact on the environment (Tourism New South Wales). Wight (2001), Boo (1990:11) and Mehmetoglu (2007) refer to this as 'eco-tourism' - travelling to relatively undisturbed or uncontaminated natural areas with the aim of studying, admiring and enjoying the scenery. Section 3.2 defines nature-based tourism in detail.

1.7 STRUCTURE OF THE THESIS

This thesis is structured as follows:

Chapter 1: Introduction and Problem Statement
This chapter presents a background of the study area and a concise problem statement as well as the research methodology. It clarifies the different concepts used in the study.

Chapter 2: Universal accessibility
This chapter provides an overview of universal accessibility as a concept and examines the issues surrounding it. It defines disability and classifies the different types of disabilities among humans. It further explores the economic argument for disability tourism by examining statistics on people with disabilities and their economic contribution. The concept of universal design is also explored in this chapter.

Chapter 3: Nature-based tourism and universal accessibility
The relationship between universal accessibility and nature-based tourism is examined in this chapter, as well as case studies of best practices of universal accessibility in natural areas. The focus then moves to the accessibility of national parks in South Africa and Zimbabwe.

Chapter 4: Research Method

This chapter describes the manner in which the research was conducted. It explains the research paradigm, questionnaire design and data collection methods in detail.

Chapter 5: Empirical Results

This chapter analyses, interprets and discusses the study's findings. It addresses the state of Zimbabwe and South Africa's national parks in as far as accessibility is concerned. It presents views and perceptions of both tourists with disabilities and park management and makes suggestions as to how to achieve universal accessibility.

Chapter 6: Conclusions and Recommendations

This final chapter draws conclusions from the findings and suggests a framework for universal accessibility in Zimbabwe and South Africa's national parks.

CHAPTER 2

DISABILITY AND UNIVERSAL ACCESSIBILITY

2.1 INTRODUCTION

The concept of universal accessibility was an answer to the silent call by disadvantaged members of society, the disabled, whose access issues are not on the global agenda. The focus was on the so-called able-bodied, who could easily voice their concerns. As will be discussed in this chapter, the disabled include people with mobility restrictions, visual impairments, hearing problems and many other dimensions of disability. The global increase in the number of elderly people also prompted the need for universal accessibility. Research has revealed that, to a greater extent, there is a positive correlation between age and disability or impairment (Darcy, 2002; Turco *et al*., 1998; Yau *et al*., 2004:948). This chapter defines the main concepts and terms in universal accessibility. It discusses the dimensions and models of disability in detail and the model that informs this particular study. The relationship between universal accessibility and universal design is clearly articulated and global as well as local legislation that governs universal accessibility practices is examined.

2.2 CONCEPTUALISING DISABILITY

Disability has been defined differently depending on (i) who defines it and (ii) the purpose for which data is collected. Indeed, the number of definitions is evidence that this concept has not received adequate attention as a field of study. Individuals, organisations and societies have defined disability differently. Chen (2004:23) points out that Western and Eastern cultures have varying opinions on disabilities due to differences in their respective philosophies and religions. This is supported by the fact that over the years, schools of thought have been changing regarding disability; hence the variety in definitions (Buhalis & Darcy, 2011:21). Shakespeare and Weston (2001:19) argue that; "…disability is the quintessential post-modern concept, because it is so complex, so variable, so contingent, so situated. It sits at the intersection of

biology and society and of agency and structure. Disability cannot be reduced to a singular identity: it is a multiplicity, a plurality."

The Americans with Disabilities Act (ADA) defines disability as "a physical or mental impairment that substantially limits one or more major life activities of an individual" (ADA, 1990:7). The major activities referred to include caring for oneself, hearing, walking, and lifting, to name but a few. The ADA definition does not include people with temporary impairments like a fractured bone. In order to incorporate temporary impairments, Weiss and Rapoport (2010:27) described temporary impairments in his explanation of mobility restrictions. The World Health Organization (WHO) defines disability as any constraint ensuing from an impairment of the ability to carry out an activity in a way regarded as normal for a person (WHO, 1980). However, this definition has met with much criticism; many argue that it subscribes to the medical model which assumes that disability is the problem of the person who possesses it. Instead it is argued that, in reality, disability is a social construct imposed by society rather than the cognitive limitations that someone may have (Darcy, 2010:816; Buhalis & Darcy, 2011:24).

Despite their shortcomings, most classifications of disabilities have been based on the WHO (1980) and UNEnable (2009) definitions. These classifications distinguish impairments from disabilities (Buhalis & Darcy, 2011:21).

2.2.1 Impairment and Disability

One may wonder why the concepts of disability and impairment are included in a discussion on universal accessibility. The answer is simple: had it not been for these issues (disability and impairment), the issue of accessibility would not have been raised. It is usually people with impairments and disabilities whose accessibility is compromised because of their inability to perform certain tasks. The aged, children and pregnant women also require enhanced accessibility because of their disabling conditions. It is against this background that one should understand the concept of disability.

The word *disability* is often confused with impairment and other related terms. Burnett and Baker (2001) as cited in Buhalis *et al.* (2005:9) argue that it is important to distinguish between disability and impairment. However, this is determined by the nature and purpose of the data

required and the classifications used (Eurostat, 2002). At times some do not see any need to distinguish between the two while in some instances, the difference could be very material.

The Union of the Physically Impaired against Segregation (1975) as cited in Buhalis and Darcy (2011:27) defines impairment and disability as follows:

Impairment - “Lacking part of or all of a limb, or having a defective limb, organism or mechanism of the body”.

Disability - “The disadvantage or restriction of activity caused by contemporary organisations which take no or little account of people who have physical impairments and thus exclude them from the mainstream of social activities“ (Buhalis *et al*., 2005:9). This definition reveals that impairment can be the result of an ‘act of God’ but disability is caused by the way people organise or arrange things. While impairment comes from ‘acts of God’, disability is man-made.

Buhalis and Darcy (2011:24) argue that the WHO and UNEnable definitions are too medical in their focus on the loss or lack of the individual. They emphasise the person’s inability rather than those environmental aspects that disable someone. This has resulted in a number of models that sought to make up for the shortcomings of the medical approach to disability. These models are discussed later in this chapter.

The following section discusses the dimensions of disabilities. It should be borne in mind that the focus is on disability and not impairment as impairments are not a problem in themselves; they only become an issue when a disabling environment is presented.

2.2.2 Dimensions of Disabilities

Disability is a multidimensional condition that can arise from a variety of impairments acquired at birth, or from accidents and illness or as part of aging process (Centers for Disease Control and Prevention (CDCP), 2009: 421-426.). According to Weiss and Rapoport (2003), the effects may be on one’s organ(s) or a part of the body; they can also be psychological. The effect could also be one’s involvement in some areas of life. Choruma (2007:12) argues that a disability in one dimension may not necessarily mean a disability in other areas of life. For example, a person with a visual impairment may have a very sound intellectual capacity.

Different terms and descriptive headings have been used to define the different types of disability. The CDCP (2009:421-426) classifies them under mobility, sensory, communication, intellectual and hidden disabilities as shown in Table 2.1. Each is explained in turn.

According to Householder (2001) as cited in Buhalis *et al*. (2005:9), mobility impairments prevent one reaching, stretching and doing other activities that require the movement of limbs. An upper or lower limb, or the back and neck are usually affected (Weiss & Rapoport, 2003). The ability to coordinate actions is limited, impaired or delayed. In most cases such a person is not able or has limited ability to move or conduct other life functions independently. People with temporary bone fractures also fit into this category.

Sensory and communication impairments, as the name suggests, have to do with vision, hearing and speaking. These cause a decrease in or loss of a sense. A visually impaired person has sight problems where sight is limited or completely absent. This makes reading and written communication difficult; in other words, any information presented visually becomes a challenge (American Foundation for the Blind, 2012).

Like visual impairments, hearing impairments are a challenge to communication. People with hearing impairments are hard of hearing, implying that they have partial hearing capabilities and can only hear properly when hearing aids are used. This implies that any oral communication is impossible without aids (Preston, 2002 as cited in Buhalis *et al*., 2005).

Intellectual impairments are usually the result of long mental illness or accidents that result in behavioral disorders (Pomona, 2004). At times they are a result of birth complications or poisoning. Anyone with a mental or intellectual impairment has problems understanding concepts and facts and, in the conventional world, is referred to as a slow learner. The World Health Organisation (1992) categorizes intellectual disability as ranging from mild to profound intellectual disability. In each category, sensory impairment may also be present.

It is also important to mention hidden impairments. These are usually not seen but are a cause of lack of strength and alertness, attention deficit and hyperactivity disorders (DEO, 2005). Common examples of such impairments include diabetes, epilepsy, and hypertension and heart problems. These hidden ailments may be acquired at birth or develop as one grows old (ICF,

2001). In tourism, these are usually not a major concern unless they are communicated. The dimensions are summarised in Table 2.1 below.

Table 2. 1: Dimensions of disabilities

Type of Impairment	Description	Difficulties in one of more of the following areas:
Mobility impairments	Varying levels of physical mobility restrictions, affecting legs, feet, back, neck, arms or hands	- physical and motor tasks - independent movement - performing basic life functions
Sensory impairments	Capacity to see is limited or absent Completely deaf or hard of hearing	- reduced performance in tasks requiring clear vision - difficulties with written communication - difficulties with understanding information presented visually - reduced performance in tasks requiring sharp hearing - difficulties with oral communication - difficulties in understanding auditorally-presented information
Communication impairments	Limited, impaired, or delayed capacity to use expressive and/or receptive language	- general speech capabilities, such as articulation - problems with conveying, understanding, or using spoken, written, or symbolic language
Intellectual/ mental impairments	Lifelong illnesses with multiple aetiologies that result in a behavioural disorders	- slower rate of learning - disorganised patterns of learning - difficulties with adaptive behaviour - difficulties understanding abstract concepts - limited control of cognitive functioning - problems with sensory, motor and speech skills - restricted basic life functions

Hidden impairments	Variety of illnesses	- heart problems - blood pressure or circulation problems - breathing difficulties - problems with stomach, liver or kidneys - problems in controlling the level of sugar in the blood (diabetes) - disorder of the central nervous systems (epilepsy)

(Source: Buhalis *et al*., 2005:13)

While there are many dimensions of disabilities, the current study focused specifically on mobility and sensory (visual and hearing) disabilities. These dimensions have a serious impact on tourism since in most cases tourists spend their time seeing, hearing and moving.

2.2.3 Models of Disability

Disability models were developed to simplify disability as a concept as well as to enhance understanding of disability by professionals and students who have a limited but expanding knowledge of disability issues (Oliver, 1990:7). Understanding these models is critical to a discussion of universal accessibility since they provide a basis on which understanding of what disability does or does not entail is anchored. There are several classifications of disability models. In this research, three broad social frames of analysis were considered since these appear to be the most prominent in the literature. These are the (i) traditional model of disability, (ii) medical model of disability and (iii) social model of disability (Samaha, 2007:09; Oliver, 1990:14; Darcy, 2002; Pfeffer, 2001:29). Some scholars further subdivide these into subclasses depending on their socio-cultural environments (Pfeffer, 2001:29). However, Buhalis and Darcy (2011) are of the opinion that the major contention in scholarship has been between the medical and social models.

2.2.3.1 The traditional model of disability

Sometimes referred to as the Religious Model (Ghosh, 2012:4; Garland-Thomson, 1997), the traditional model is based on sympathy, charity and a 'Good Samaritan' way of thinking. It is believed to be the oldest of all models of disability (Seelman, 2004:4; Barnes & Mercer, 2003). This model is based on the Christian religion's perspective of PwDs and the understanding that every God-fearing individual has the responsibility to take care of PwDs in their society. This model is appealing as it focuses on sympathy for, or outright rejection of disabled persons. In terms of this school of thought, disabled people are considered to be an unfortunate group (Mackelprang & Salsgiver, 2009:10; Khupe, 2012:13).

Those with physical disabilities are regarded as crippled under this model and the able-bodied are regarded as 'better than' their disabled counterparts in every aspect of life (Mackelprang, & Salsgiver, 2009:10). What is unfortunate about this model is that PwDs are considered to have been cursed by God because of their sins or those of their forefathers. Anyone related to a disabled person would feel ashamed because of the abnormality of their relative (Condeluci, 1995). These sentiments were confirmed by a study by Marongwe and Mate (2008:25), where some respondents argued that when a child is born with a disability, it is usually because either the mother has been immoral or her ancestral spirits need to be appeased because of a wrong done by someone in the family.

No matter what kind of disability disabled people have, they are not considered specimens of humanity, but are viewed as objects of pity who are supposed to be cared for (Khupe, 2012). In turn, they should be grateful to those who care for them. Such interpretations of disability are unfortunately part of the cultural heritage of many races and tribes and Zimbabwe is no exception (Chitima, 2013; Khupe, 2012).

It was partly in this context, that Professor Leslie Swartz (2012) of Stellenbosch University candidly commented that many disabled people do not access education, training and work opportunities (Chitima, 2013). They do not get a chance to develop the skills and talents that they have. That is clearly the result of exclusion and discrimination, partly due to the global belief among many able-bodied people that people with disabilities are not competent.

Harris and Enfield (2003:11) note that it is not uncommon for disabled people to become dependent upon their source of help, and for alms-givers to gain gratification and reward from

the relationship. Charity is provided at the discretion of the giver and on the basis of worthiness. If the person providing charity or care decides that the disabled is unworthy, bitter, or 'negative', help may be withdrawn.

People with disabilities people are often pictured as being "tragic and passive, if they need high levels of support; as bitter, twisted, and aggressive, if they are beginning to question the status quo; and as courageous and inspirational if they managed, against all the odds, to overcome the barriers that confront them" (Khupe, 2012:13). An off-shoot of this model called the divine intervention approach has developed in recent years (Chitima, 2013; Khupe, 2012). This causes untold havoc to PwDs, because disability is associated with demonic possession; thus a disabled person is believed to be tormented by the devil. This model has been accepted by Christian faith healers especially born again or charismatic sects.

Traditional Christian religion approaches disability with a sympathetic heart and mind, because to them disabled people are natural recipients of sympathy and regular alms (Shapiro, 1993; Chitima, 2013:31). According to this approach a disabled person is associated with destitution and poverty that is beyond redemption. Therefore the best society can do for disabled people is to decide what is good and bad for them; regardless of their age, they are thought to be unable to make rational choices about their lives. This approach is clearly illustrated in the manner in which public amenities established by Christian communities, such as traditional places of worship are constructed. They are often highly inaccessible by PwDs because of steps and other impediments (Gill, 1993).

It is in the above context and the hopeless predicament embedded in it, that Eiesland (1993:113) observes that, **"**For many people with disabilities the Eucharist is a ritual of exclusion and degradation. Access to this celebration of the body is restricted because of architectural barriers, ritual practices, demeaning body aesthetics, unreflective speech, and bodily reactions. Thus the Eucharist becomes a dreaded and humiliating remembrance that in the Church we are trespassers in an able-bodied dominion".

Still within the Christian faith, the divine intervention believes that a person with a disability is enslaved by the devil (Mackelprang, & Salsgiver, 2009:11). This means that if the devil is removed; the disabled person automatically regains normal human functions. It is amazing that, after identifying disability with the evil work of the devil, proponents of divine intervention claim

that the one with a disability has to pray hard under the guidance of a pastor to receive redemption.

In Zimbabwe the divine intervention approach has generated much controversy because if the impairment does not go away, the disabled person is blamed for not believing enough (Khupe, 2012). In the event that a person reports an improvement, even if it is not directly connected to prayers facilitated by the Church, and no matter the significance of the positive improvement, the credit is attributed to the man of God, the pastor for his amazing faith healing power. Nevertheless Christianity is resolute that all persons are equal before God (Colossians Chapter 3 verse 11).

Eiesland (1993:111) rightfully claims that, “Justice for people with disabilities requires that the theological and ritual foundations of the Church be shaken”.

This is not to reject or to underestimate the important role played by the Christian faith in improving the lives of people, including those with disabilities, especially in Zimbabwe. However, discrimination masked by the cloak of religion cannot be tolerated by disabled people in Zimbabwe (Khupe, 2012; Chitima, 2013). The general myth widely held by religious eccentrics is that whenever a disabled person visits a public place of worship, the major reason will be to seek to be healed from the burden of disability. This is very wrong. The importance of these myths is not whether they reflect the truth; rather, African Traditional Religion (ATR) and Christian religious meanings or myths carry the day. Generally speaking, there is an affinity between ATR and the Christian faith (Khupe, 2012). Both believe in the power of evil in the world and that this power is the root cause of disability (Ghosh, 2012:4; Garland, 1997).

2.2.3.2 The medical model

The medicalization of disability resulted from improvements in medical technologies in the post 2nd World War era (Buhalis & Darcy, 2011:24). Health professionals have tried to normalize the lives of PwDs as if this permanent condition were an illness, hence the name medical model (Longmore & Umansky, 2001:26). They use therapies to normalize the disabled, treating them like medical patients. In so doing, they disempower PwDs, and marginalize and segregate them and dependency syndrome is created (Buhalis & Darcy, 2011:24). People with disabilities are paternalised and treated as if they are ill.

Oliver (1996:31) notes two important components of the medical approach. First, it blames the individual with the disability. It views disability as a personal tragedy. Secondly, the cause of the disability is an issue for concern. Disability is viewed as a product of an abnormal body due to disease, illness or trauma; hence, it requires medical attention. The person with a disability is less able than his/her able-bodied counterparts and if nothing is done about it, the person with a disability is deficient forever (Gibson & Depoy, 2000:12).

By classifying people with disabilities as ill, the medical model suggests that such people cannot engage in normal daily tasks and obligations (Buhalis & Darcy, 2011; Pfeiffer 2001) and cannot participate in social activities. The ill do not go to work or to class, and if they go to school, they need special schools, therapists, and care. They need professionals (doctors) to tell them what to do in order to get well or recover; if they do not comply, they suffer. At times, especially in cases of mental disabilities, they are forced to take medication. According to this model, anyone who has a permanent disability is sick for life and will never 'get well'; therefore they are dependent forever (Pfeiffer, 2001:30). Disabled people accept the role of medical intervention when necessary. However, what they find offensive and degrading is the medical model's emphasis on the search to cure disability instead of helping disabled people to manage their lives (Khupe, 2012). Werner (1994:48) candidly states that "…and, most urgently of all, it is time for non-disabled professionals to recognize the right of disabled persons to self-control, and therefore to gracefully step to one side, into a role where they, as professionals, are no longer on *top* but rather on *tap*".

The medical model suggests that disability is anchored on the notion that someone is not able to act in a 'normal' way. According to Amundson (2000:33) the term 'normal' is fictional and subjective. He argues that normality is neither objective nor scientific and may only be a means by which the dominant class in society (the normal) seeks to remain dominant and powerful. Pfeiffer (2001:31) uses the same argument to criticize the International Classification of Impairments, Disabilities and Handicaps (ICDH) whose classification of disabilities is based on the medical model.

According to Vash (2001:38), it is because of the medical approach that most people have a negative, demeaning and limiting attitude towards people with disabilities. Policy makers should not assume that PwDs are sick since most disabilities are incurable. They also need to

understand that PwDs acknowledge their state and most have developed special skills to survive. Some of these skills may never be acquired by the so-called able bodied.

There is no doubt that the medical model is a nominal improvement on the traditional model in that it provides the perspective of medical professionals and their associates. On the other hand, this model does not help to change negative perceptions of the status of disabled people in the eyes of 'normal' society (Harris & Enfield, 2003). The only major difference is that the medical model is slightly free from the traditional myths attached to disability. Although it is a later conception and hence a minor positive development, it still regards disability is a deviation from the norm that calls for medical intervention to put it right at all costs.

To counter the negative perceptions of disability associated with the medical approach, scholars have formulated many models, including the social constructionist model, social model, impairment version, the oppressed minority version, the independent living approach, and the postmodern, post-structuralism, humanist, experience and existentialism versions (Oliver, 1990; 1996; Darcy, 2002; Pfeiffer, 1998, 2001). The social approach has posed the greatest challenge to the medical and traditional models (Oliver, 1996). In one way or another, it consists of elements of these other 'protestant' approaches. The researcher therefore decided to focus on the social model as a corrective approach to the medical thinking.

2.2.3.3 The social model of disability

This model rides on the notion that disability is a social construct, not an individual problem (Oliver, 1990, 1996; Darcy, 2002, Pfeiffer, 1998, 2001). It does not victimize the person with impairment but blames the environment for the state of affairs. The model emphasises that society should put supportive mechanisms in place in order to remove barriers to social, physical and recreational participation (Buhalis & Darcy 2011: 27; Aitchison, 2003; Darcy, 2002; Gilson & Depoy, 2000).

Disability was regarded as an individual issue until after the 1970s when disability movements advocated for a reconceptualization of the discipline (Abberley, 1987). The social model critiques the medical model by not viewing disability as a medical condition but rather as a social construct. In other words, it is society that excludes PwDs from participating in normal activities by erecting barriers (Oliver, 1990, 1996). The way in which society is organized in

terms of economic activities, the built environment, transport system and culture, among other issues, automatically excludes PwDs. 'Disabled people' are produced by social arrangements or constructs (Barnes *et al.*, 1999:7; Darcy & Buhalis, 2011:28). This study adopts this school of thought. If social, economic, technological, political and physical environments incorporated people with impairments, they would never acquire disabilities (Swain *et al.*, 2004). The problem then, does not reside in the person, but the society in which they live.

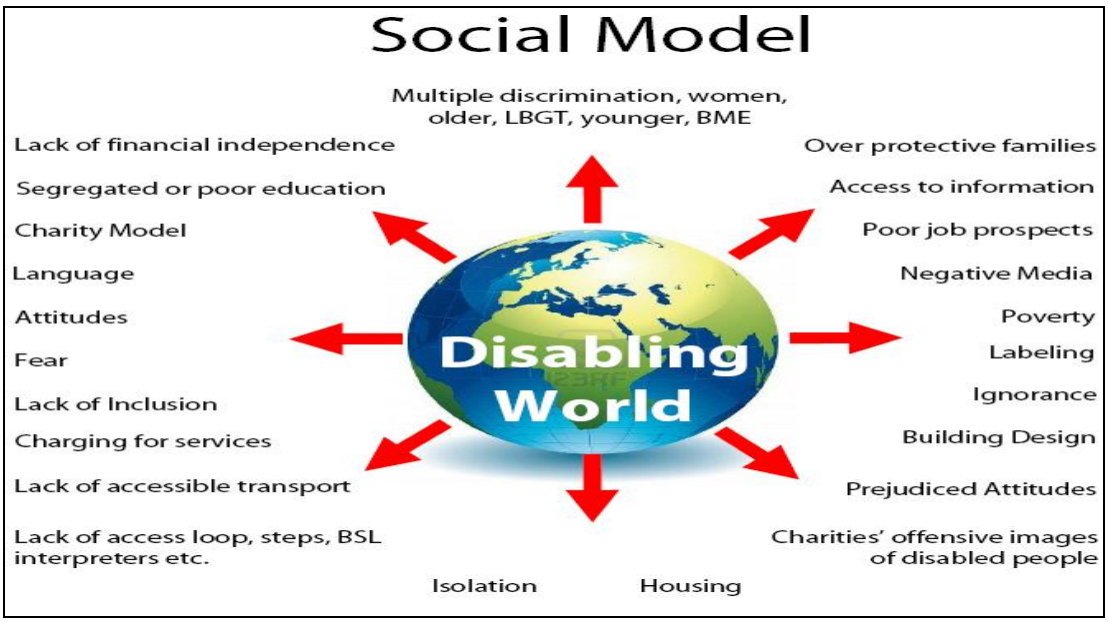
This model is very popular with disabled people the world over because it is premised on the manner in which society is organized, resulting in unfair exclusion of citizens with impairments from full participation in mainstream social activities. It takes an emancipator approach to disability issues because it calls for socially constructed barriers to inclusion to be demolished. Harris and Enfield (2003) identify three major barriers that confront persons with impairments. These are physical (exclusion from the built environment), institutional (systematic exclusion or neglect in social, legal, educational, religious, and political institutions), and attitudinal (negative evaluations of disabled people by non-disabled people).

This model calls for equalization of opportunities in all spheres of life. It does not reject forms of medical intervention whose sole aim is to mitigate the burden associated with impairment by means such as rehabilitation and assistive devices. In this context, all human beings' basic needs including PwDs are the same. Harris and Enfield (2003:93) argue that, "the social model has allowed many disabled people to regain control of their own lives, becoming the experts on their own experience and changing their outlook in fundamental ways".

An understanding of the social model provides a radically different framework to understand the discrimination that arises as a result of impairment. For many Disabled People's Organizations (DPOs), the social model of disability describes the true nature of the problem of disability. The problem lies in society's response to the individual and the impairment, and in the physical environment, which is mainly designed by and for non-disabled people (Khupe, 2012). The social model of disability is a liberating model because, as opposed to both the traditional and medical models, it sees the panacea of the problems facing disabled people as emanating from changes in attitudes in communities where PwDs live, starting with the family, rather than changes in the impaired individual. Donnellan (2001:4) is of the opinion that, if societal barriers are removed, PwDs can comfortably live side-by-side with their non-disabled brethren.

Disability is the result of an environment that does not conform to universal design specifications; barriers, not the disability of a particular people, are the problems which must be eradicated, (Enns & Neufeldt, 2003:14). It cannot be denied that disabled people have largely been excluded from many economic and social activities including tourism and recreation (Kitchin, 1999). Apart from enacting laws, very little has been done to alleviate the plight of this segment of the population. Where laws exist, they are often not enforced and the disabled continue to suffer exclusion. This is unlike other areas of human emancipation such as gender and HIV and Aids which not only receive government endorsement, but financial support (Bach, 2003:38). Figure 2.1 below summarises the major factors that make up a disabling society.

Figure 2. 1: Factors that make up a disabling society



(Adopted from Disability Action in Islington, 2012).

The figure clearly shows that there are many social constructs that make life very difficult for persons with impairments, thus disabling them. If these barriers could be removed, people with impairments would experience life like others. The following section discusses how the rights and privileges of people with disabilities can be restored.

2.2.4 Universal accessibility and universal design

Scholars have written extensively on the concept of disability and tourism (Darcy, 2008, 2010, 2012; Buhalis & Darcy, 2011; Buhalis *et al*., 2005; Baker, 2001); the major focus has been on making tourism accessible to PwDs. These scholars point out that PwDs are excluded from

tourism and advocate that facilities and systems be modified for such people. This pool of studies on accessible tourism was partly motivated by the establishment of legislation on accessibility in last decades of the 20th century (Mace *et al.,* 1991:3). Before delving into the concept of universal accessibility and design, it is important to understand the predecessors of these concepts. These include accessible design, usable design and adaptable design (Mace *et al.*, 1991:5). The UNWTO added another term, 'reasonable accommodation' in its 2005 General Assembly report (UNWTO, 2005). These are referred to as 'predecessors' because universal design was a long journey whose destination should have been universal accessibility. These concepts are discussed in the sections that follow.

2.2.4.1 Accessible design

Accessible design ensures that PwDs have access to products, services and facilities with minimal or no difficulty. In tourism, some have defined this as disabled/disability tourism (Buhalis et al., 2005; Burnett & Bender-Baker, 2001:4; Yau *et al*., 2004:946) while others have named it easy access tourism (Cameron, 2000:68; Tourism New South Wales, 2000). It advocates for a barrier free environment for PwDs (Buhalis & Darcy, 2011; Darcy, 2010; Cameron *et al*., 2003). The 20th General Assembly of the UNWTO reaffirmed the principles of accessibility as agreed in Senegal which mandate all member states to make their tourism sites and establishments accessible to PwDs and to offer them special facilities at no extra cost. It also mandates tourism establishments to offer special training to staff members in order to prepare them to better work with PwDs (UNWTO, 2013). Accessible tourism is concerned specifically with PwDs. It was a response to the feeling that PwDs had been 'a forgotten tribe' (Choruma, 2007) for too long and had been side-lined when it comes to tourism and recreation (Buhalis & Darcy, 2011: 300).

Along the same lines, accessible design is an enabling tool for accessible tourism. It requires all designers to tailor-make their products in such a way that they meet the special needs of PwDs and those of other tourists. Accessible design sometimes refers to making facilities and services usable by PwDs with little or no aid. The Centre for Universal Design at North Carolina State University defines accessible design as the measure of the extent to which products or services can be as effectively used by a person with disabilities as it can by a non-disabled person (Centre for Universal Design (CUD), 1997).

2.2.4.2 Usable design

The International Organisation for Standardisation defines usable design as the effectiveness, efficiency and satisfaction with which a specified set of users can achieve a specified set of tasks in a particular environment (Mace, 1991:2). In other words, manufacturers test the usability of a particular product or service by the extent of its effectiveness when used by a selected group of people to complete a given set of tasks. Unfortunately, PwDs are not used in usability tests since they are not considered normal by some sections of society (Pfieffer, 2001).

2.2.4.3 Adaptable design

Propounded by Lasher and Mace in 1989, the concept of adaptable design offers basic universal features which can be adapted to the needs of a specific user. It is interesting that most of the facilities for PwDs are actually suitable for people in wheel chairs - a small proportion of the disability community (Mace *et al*., 1991). With this in mind, houses and other facilities can be constructed in such a way that they accommodate this segment of the population at a specific point in time and in only certain ways, especially at places that receive only a small number of people with special needs. The concept came into being after some operators realised that after meeting all accessibility requirements, only a few PwDs used the facilities. Furthermore, so-called able bodied people shun these accessible facilities due to their special appearance (Mace *et al.,* 1991). In essence, adaptable design allows for the non-disabled to use the same facilities as their disabled counterparts without the feeling of being treated as special. With adaptable design, some accessible features are hidden, moved or adjusted when not required so that the facility is easily and comfortably usable by anyone. Again, there is rich evidence that this concept, like the previous ones, focuses on people with known special needs.

2.2.4.4 Reasonable accommodation

With reasonable accommodation, appropriate and necessary modifications and adjustments are made to existing facilities without causing a disproportionate burden to ensure that PwDs enjoy all human rights and fundamental freedoms (United Nations World Tourism Organisation, 2013: 4). The argument behind reasonable accommodation is that, while the need for accessibility is understood, the cost factor should also be considered. The adjustment or modifications to make tourism facilities accessible by PwDs should ensure that they enjoy their freedoms while the operator remains profitable. In other words, the change must not be absolute.

2.2.4.5 Universal design

The terms ‘accessible’ and ‘barrier free’ have been found wanting when it comes to defining reality in the realm of accessibility (Mace *et al.,* 1991:1). This is mainly the result of the diversity of the accessibility needs in society. Even specialists have limited knowledge of the extent of the accessibility problem. What is barrier free to one person may not be regarded as such by another; for example, a ramp is perfect for a person using a wheelchair but may actually be a barrier to a blind person. This calls for a different approach to accessibility.

While accessible tourism and its related concepts aim to ensure that PwDs have equal access to tourism services, universal accessibility goes beyond accessibility. It calls for all products, services and environments to be usable by all people, to the greatest extent possible without the need for adaptation or special design (Buhalis & Darcy, 2011:300). The idea behind this concept is to simplify life for everyone, not just PwDs, although the latter group is an easier vehicle through which this concept can be enforced (CUD, 2009). Ginnerup (2009) argues that the concept encourages the participation of all people over their lifespan and across socio-cultural divides. It offers solutions to all regardless of age and disability.

Universal design is not a trend, but an approach or paradigm which assumes that the variety of human ability is ordinary, not special. It does not look at individual abilities, but at sustainable architectural and design practice (Mace, 1991:10). Instead of designing special features for access, universal design seeks to provide an environment that allows the inclusion of the widest

array of users. It is important to note that universal design may not be design for all, but for the widest spectrum of users.

According to Snyman (2002:17) and Steinfeld (1994:1), universal design differs from accessible design in a number of ways. With accessible design, products and services are designed for people with special needs while in universal design; products are accessible and usable by everyone regardless of their age, gender, and abilities. With accessible design, separate facilities are provided for PwDs aside those for the able-bodied while with universal design, one solution is provided that can accommodate PwDs, children, the left handed and the right handed and many other embodiments. Small and Darcy (2011:10) note that universal design, unlike its predecessors, recognises the nexus between ageing, disability and the continuum of ability of people over their lifespan by incorporating intergenerational and lifespan planning.

2.2.4.5.1 Why go beyond mere accessibility?

Apart from the unprecedented growth in the number of PwDs, the increasing number of people with other conditions that cause disability and increasing legal pressure for universal accessibility, the need for universal accessibility still remains critical. First and foremost, it is important to note that very few people are born with disabilities (Mace, 1991:13). Disabilities are often acquired during a person's lifespan and this makes the subject of universal accessibility a sobering reality for everyone. Universal design should therefore be a priority by everyone given the fact that only God knows where life will take us. Furthermore, embracing the concept of universal accessibility and design is a sure way of avoiding situations where clinical adjustments will have to be made later in life when unexpected disability occurs (Lusher & Mace, 1989).

The driving force behind universal design is the wide range of accessibility requirements due to human capabilities. While the fact that PwDs have been left out has been addressed to some extent, the solution has not been inclusive. This comes in the face of the increasing emancipation of many disadvantaged groups worldwide which include the aged, women, and people with disabilities, children and those with a variety of chronic illnesses (Zimmermann, 2006). The majority of the aforementioned have also become increasingly economically active, making universal design a requirement.

As already noted, most regulations and scholars emphasise requirements (accessible design) instead of universal design. An examination of the following benefits of universal accessibility may change ways of thinking about accessibility:

- It reduces stigmatisation associated with specific disabilities. In other words, there is no need for a separate wheelchair accessible entrance. For example, instead of having a separate wheelchair entrance at the far end of the building, a universally accessible entrance (e.g., automatic sliding doors) would accommodate people with many other disabilities; pregnant women, the obese, children and the able-bodied.

- There is no need to readjust the facility when people with another form of disability want to use it. This saves on costs. For example, ramps can be very handy for people with temporary disabilities like pregnant women and the sick and aged.

- Universal accessibility and design are likely to be the buzzwords of the future. This means that anyone who chooses to take this route today prepares themselves for the future.

- From a business perspective, universal accessibility is a competitive marketing tool. With the increasing emancipation of PwDs and other minority groups, anything that is prefixed 'universal access' is likely to sell. Furthermore, the long term costs of ignoring a potentially huge market are unfathomable.

- Everyone needs it. It is only natural that everyone passes through childhood, temporary illness, distress, injury and old age. At any, if not all, of these stages, universal design makes life easier (Zimmermann, 2006:1-2).

2.2.4.5.2 Major arguments against universal design

The concepts of universal accessibility and universal design have suffered from implementation paralysis due to two major misconceptions: a) the 'no market' and the 'it is expensive' syndrome (Mace *et al*., 1991:4). These syndromes have influenced current design approaches.

a) The 'no market' misconception

This philosophy assumes that people with disabilities:

- Do not go out much; therefore, there is no need to make tourist attractions and recreational facilities accessible to them.
- Do not need jobs or are not employed; therefore, they are poor and cannot afford to travel for leisure and hence don't constitute a viable consumer market.
- Do not have families, are not married and have no children; therefore, a single room is enough for them.
- Only need access to the doctor's office and other social and health care services. This means that only such facilities should have some level of accessibility (the medical model).
- Want to live together; no wonder they are closed up in disability homes!

Most of these misconceptions are addressed in the following section that discusses the economic significance of PwDs in detail.

b) The 'it is expensive' syndrome

There is general agreement (although not factual) among tourism and other operators that making tourism universally accessible is very expensive and not practically feasible. Such thinking is based on the fact that the accessible facilities have to be added to the usual costs of construction, renovation and adjustment (Mace *et al.,* 1991:20). On the contrary, studies undertaken by the National League of Cities and the United States General Accounting Office (GAO, 1983) reveal that the cost of accessibility features is less than half of one per cent of the cost of new construction. Some experts argue that the costs of accessibility are often exaggerated and are normally traded off. For example, the cost of a wider doorway is usually less than the cost of the wall it replaces (CUD, 1997).

Apart from construction costs, another common cost when it comes to accessibility is the cost of training (Mace, 1991:20). While it might be a costly to train employees, the cost of litigation is more painful and unnecessary. Organisations that advocate for universal accessibility may sue for non-compliance. Furthermore, a universally accessible tourism facility saves staffing costs. The number of employees who spend time assisting PwDs may significantly be reduced since there will not be much need for assistance when people with different disabilities visit the destination or attraction.

Universal design needs to be embraced from the very beginning if it is to become cheaper and more effective. It should be incorporated from the business plan stage since renovating for accessibility may be unaffordable. At times, complete demolition may be necessary in order to be universally accessible. Therefore organisations should not wait until the legislation catches up with them (Mace *et al*., 1991).

2.2.4.6 Principles of universal design

Universal design is guided by seven principles that were coined during the Civil Rights era in the United States of America and systematised by the Centre for Universal Design in 1997(CUD, 1997). Although these principles were created for the USA, they have been widely adopted throughout the world. A short description is provided of each principle.

Principle One: Equitable use - The design is useful and marketable to people with diverse abilities. In other words, provide the same use for all users: identical whenever possible; equivalent when not. Avoid segregating or stigmatizing any users. Privacy, security, and safety should be equally available to all users. The design should appeal to all users.

Principle two: Flexibility in use -The design accommodates a wide range of individual preferences and abilities. Provide choices in methods of use and accommodate right- or left-handed access and use. Facilitate the user's accuracy and precision and provide adaptability to the user's pace.

Principle three: Simple and intuitive use - The design is easy to use, regardless of the user's experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity; be consistent with user expectations and intuition. Accommodate a wide range of literacy and language skills and arrange information consistent with its importance. Provide effective prompting and feedback during and after task completion.

Principle four: Perceptible Information - The design effectively communicates necessary information to the user, regardless of ambient conditions or the user's sensory abilities. In this regard:

- Use different modes (pictorial, verbal, tactile) for presentation of essential information.
- Provide adequate contrast between essential information and its surroundings.
- Maximize the 'legibility' of essential information.
- Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

Principle five: Tolerance for error - The design minimizes hazards and the adverse consequences of accidental or unintended actions. In order to achieve this:

- Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- Provide warnings of hazards and errors.
- Provide fail safe features.
- Discourage unconscious action in tasks that require vigilance (CUD, 1997).

Principle 6: Low physical effort - The design can be used efficiently and comfortably with minimal fatigue. Make sure you allow the user to maintain a neutral body position and use reasonable operating force. Minimize repetitive actions as well as sustained physical effort.

Principle 7: Size and space for approach and use - Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility. Therefore:

- Provide a clear line of sight to important elements for any seated or standing user.
- Make reach to all components comfortable for any seated or standing user.
- Accommodate variations in hand and grip sizes.
- Provide adequate space for the use of assistive devices or personal assistance (CUD, 1997).

2.2.5 Economic argument for universal accessibility

While some authorities and operators argue that universal accessibility is an unnecessary expense as a result of the 'no market' mentality (Mace *et al.,* 1991), others regard this as an important and growing market (UNWTO, 2013:2; Buhalis & Darcy 2011:189) and an opportunity to win new customers and increase tourism revenue at a time when conventional market segments are weaker.

In its update on the 2005 General Assembly Recommendations on Accessible Tourism for All (UNWTO, 2013) the UNWTO bemoans the fact that some operators in the tourism industry regard universal accessibility as an obligation or legal requirement when it should be seen as an economic opportunity. The UNWTO argument is based on the thinking that if more individuals enjoy the opportunity to travel, the industry gains from more visitors, prolonged seasons and new sources of income. This is premised on the fact that the accessibility market is growing.

2.2.5.1 Disability and aging

The relationship between aging and disability cannot be overemphasised and it is important to note that the number of aged people is increasing. About 650 million people worldwide are estimated to be disabled in one way or another (Sharma, 2008:2; Buhalis & Darcy, 2011:6). This is likely to be a gross underestimation in some countries where disability statistics are unavailable and where disabilities are usually hidden from the public eye due to myths associated with such disabilities. This increase has been mainly attributed to ageing and other health related factors (Darcy, 2002:137; Turco *et al*., 1998; Yau *et al*., 2004:948).

A study in Australia revealed that, a person over 65 years of age is 14 times more likely to have a disability than a four-year old (Australia Bureau of Statistics, 2004; Uhlenberg, 2009). The US 2000 census found that 41.9% of people aged 65+ had sensory, physical or mental impairments and 3.3% had serious physical limitations that required one-on-one care (Buhalis & Darcy, 2011:193). The severity of the cases increases as one gets older. However, Mann (2005:6) argues that older persons with impairments may not necessarily be disabled if they find ways of

making up for that impairment. In most cases, however, the majority of old people do not find ways to compensate for their impairments, rendering them disabled.

Worldwide, the number of aged people is expected to increase tremendously by 2050 and the greatest increase is expected in developing countries, especially in Asia. This is attributed to improvements in the general standard of living in these countries. According to the US National Institute of Ageing, there were approximately 500 million people in the 65+ cohort ('baby boomers') in 2006. This is expected to reach the one billion mark by 2030 and two billion by 2050 (Dobriansky *et al.,* 2007:5; Dwyer, 2005:79). This would mean that one in every five people worldwide will be aged (UN, 2000). About 16% of Americans were 60 years and above in 2005 and by 2050, this is expected to increase to around 26%. In 2005, people aged 60 and above represented 10.9% of China's population; this is expected to rise to 31% by 2050. Germany and Japan are expected to register the largest growth from 25.1% and 26.3% to 35% and 41, 7%, respectively (Eurostat, 2005:254; Dobriansky, 2007:5).

The WHO responded to the growing number of elderly people by releasing the Global Age Friendly Cities: A Global Guide (2007a). This document spells out how every city planner should take into account the increasing number of the older people. In other words, it has been recognised that the 'baby boomers' have become a market to reckoned with. This is also true with leisure where the aged have become a viable market (Patterson & Pegg, 2010 in Buhalis & Darcy, 2011). This study shows that some of the aged are more willing to participate in more adventurous, challenging and authentic activities than ever before. This is where nature-based tourism comes in. In 1999, over 593 million international tourists were over 60 years old and they contributed about a third of total tourism spending (UNWTO, 2001). According to Moscardo (2006:3), a larger share of tourism spending will be attributed to senior citizens in the future. This raises the issue of universal access, where everyone or at least the majority of the population should be able to access facilities with ease despite their age, gender or level of ability (Rains, 2004:1).

In South Africa, the 2011 Census revealed that the number of people aged 60 and older increased from 2.8 million to 4.1 million in the period 1996 to 2011 (Statistics SA, 2012). It is further projected that by 2030, the aged population in South Africa will be 7 million. In Zimbabwe, by August 2014, it was estimated that 486 442 people were aged 60 and above (Index Mundi, 2014:1). By 2030, the number is expected to be just over 800 000 (International

Features at the Pardee Center, 2014). This increase is very significant to service providers since it informs their product development and marketing strategies.

Mere statistics on the numbers of aged and PwDs are insufficient to arouse industry excitement if these numbers are not economically viable. The rate of disability among people who are willing and able to travel is increasing and this is adding to current demand for accessible facilities. Luiza's (2010) article 'Accessible Tourism-the ignored opportunity' argues that much of the senior population globally has significant income and the desire to travel both domestically and internationally. Furthermore, they often spend more than the ordinary tourist. Due to the fact that most of these older and disabled people are no longer working, they tend to travel throughout the year, flattening the industry's demand curve. In other words, seasonality is reduced by this market. Moscardo (2006) argues that in the future, a large share of tourism spending will be attributed to the senior market.

The aged are becoming more healthy and affluent and will demand more from tourism (DEAT, 2012). Together with the fact that they have fewer family obligations, this makes them more likely to travel (Zimmer *et al.,* 1995:5). Wang (2011:191) observes that senior travellers travel longer haul distances than youthful travellers. For example, research in in Australia has shown that senior tourists spend an average of five overnights as opposed to three for the youthful generation (Hossain *et al*., 2003). In 1999, over 593 million international travellers were aged 60+ and they accounted for about a third of total global tourism spending. This is particularly true for developed countries where the aged have more disposable income and fewer responsibilities. In developing countries, especially in Sub-Saharan Africa, the majority of the aged have little or no disposable income and are often responsible for their grandchildren.

According to Symonds (1998:102), a new crop of retirees has emerged that is keen to travel off-the-beaten-track; this has contributed to the growth of adventure tourism. Gretzel *et al.* (2006) add that this new generation of the aged is looking for more meaningful, challenging and authentic experiences than before. Nature-based tourism has become a critical component of the travel package (among other things).

Studies carried out in Australia, the US and the European Union (EU) found that PwDs have become a significant component of the tourism market (Dwyer & Darcy, 2010). In Australia, for example, tourists with disabilities comprise 11% of the total number of tourists. Senior citizens spent an estimated $10.8 billion on domestic tourism in 2002, which is almost 21% of total tourism expenditure (Buhalis & Darcy 2011:187). Tourists with disabilities are estimated to have

spent about US$ 4580.219 million between 2003 and 2004. This contributed between US$3885.168 and US$5787 million to tourism GDP (Luiza, 2010:2). According to Hossaain *et al*. (2003) in Luiza (2010:2), total spending by Australians was expected to increase to $82 billion from $14.3 billion by 2022 and two-thirds of this was expected to come from senior citizens.

The European Network for Accessible Tourism (ENAT, 2010) reports that a survey in the United Kingdom in 2009, found that 12% of those who engaged in domestic tourism were disabled in one way or another. These tourists stayed longer than the average tourist. This concurs with the findings of a survey in Turkey by Van Horn *et al.* (2011) which concluded that PwDs stay for a long time at a destination. In Europe, research by Buhalis *et al*. (2005) revealed that tourists with disabilities spend up to 80 billion pounds per year. Touche Ross (1993:601) estimated that 8 million disabled people in Europe go on holiday abroad at least once a year and 22 million join daily excursions in their own country. This explains the seemingly large expenditure.

Studies have shown that American adults with disabilities spend an average of US$13.6 billion on travel each year (Rains, 2009:192). Kotler (2009) estimates that the 54 million PwDs in the US represent approximately US$1 billion in buying power; this is by no means a small figure in economic terms. In 2003, ‘baby boomers’ undertook 268.9 million trips in the US alone, more than any other age group (Domestic Travel Market Survey, 2004).

2.2.5.2 Important characteristics of the universal accessibility market

According to Luiza (2010), tourists with disabilities have the tendency to become very loyal to a tourist facility that meets their needs. The fact that very few products or services are universally accessible makes those available very special and once PwDs discover one, they tend to patronise the facility more often than other tourists.

Related to the above characteristic is the fact that tourists with disabilities have a tendency to become promoters for the brand they love. If, for example, the ordinary tourist tells ten other people about their favourite destination, PwDs tell others ten times more (Luiza, 2010). This suggests how much the industry is losing by failing to embrace this market.

Furthermore, the disability market spends more per visit than their able-bodied counterparts. This is mainly due to the fact that PwDs stay longer at a destination (Laise, 1991; Luiza, 2010;

Hossain *et al*., 2003). Apart from the number of days spent, the fact that they usually travel with companions, family or friends means that they spend double or treble that of an ordinary traveller. Over 50% travel with a partner, 20% with a child, and between 21 and 25% with a companion (Luiza, 2010:3).

These statistics are evidence that provisions for the disabled (including the aged) in any type of holiday situation can no longer be regarded as an optional extra but a real business opportunity. Gone are the days when accessibility was an issue of compliance; it now makes business sense to embrace the universal accessibility market. The Holiday Inn chain tried to embrace this market in the USA and it paid dividends. It targeted the hearing impaired and in the first year alone, a gain of between 40 000 to 50 000 overnight travellers was realised from this market. If it had tried to be universally accessible, rather than cater to one segment, more gain might have been realised.

2.2.6 The legal framework for universal accessibility

People with disabilities share a common history worldwide, a history associated with discrimination, stigma and segregation, among other issues (Lord and Stein, 2013:100). They are often denied the right to education, employment and recreation among other social and economic freedoms. Without any legal prescriptions, these ills would continue and reach unprecedented global levels. In a bid to curb inhumane and discriminatory treatment of PwDs and the blind eye that countries were turning to this group of people, the UN General Assembly adopted the Convention on the Rights of Persons with Disabilities (UNCRD) on 13th December 2006. The convention was first effected on 3rd May 2008 together with its Optional Protocol. This was not the first time laws and legislation was enacted to protect the rights of persons with disabilities. Individual countries adopted legislation, including the ADA of 1990 (US), the DDA of 1996 (UK) and the DDA of 1992 (Australia) but these were not universal in application. In Africa, laws were also adopted to protect PwDs. These include the Disabled Persons Act of 1992 (Zimbabwe), the Constitution of the Republic of South Africa and the Universal Accessibility to Tourism Declaration (South Africa), among others. However, the UNCRPD 2006 was the first universal law on disabilities.

2.2.6.1 The UN Convention on the Rights of Persons with Disabilities (UNCRPD) of 2006

The CRPD has 25 preamble paragraphs and 50 articles that form a framework for the realisation of the rights of the disabled (UNCRPD, 2006). However, a closer look at the convention shows that the 50 articles are not necessarily new or special rights, but rather an articulation of how existing human rights apply to PwDs (Lord & Stein, 2013). Among the major obligations outlined in this legislative instrument, state parties must: a) adopt legislative, administrative and other measures to implement the listed rights; b) abolish or amend existing laws, regulations, customs and practices that discriminate against people with disabilities; and c) adopt an inclusive approach to protect the rights of persons with disabilities in all policies and programs (UNCRPD, 2006).

Article 1 outlines the purpose of the convention while article 2 defines its key terms. Articles 3-9 highlight the general principles guiding the implementation of the instrument and articles 10-30 set out specific substantive civil, political, economic and socio-cultural rights. Articles 31-40 and 41-50 provide guidelines for monitoring and implementation and governance of the treaty's operations, respectively (Lord & Stein 2013).

Of particular interest to the tourism and hospitality sector are articles 3, 9 and 30. Articles 3 and 9 emphasise that there should be non-discrimination in opportunities and access to facilities. Tourism and hospitality service providers are mandated to ensure that anyone, regardless of their abilities, is given an equal opportunity to enjoy life and access must be guaranteed. Article 9 obliges state parties to take appropriate measures to ensure PwDs' access, on an equal basis to the non-disabled, to the physical environment, and transport and other utilities. To this effect, buildings, roads, vehicles and other indoor and outdoor facilities must be made accessible to PwDs (UNCRPD, 2006). From a tourism point of view, outdoor facilities may include recreational parks and adventure tourism facilities, among others. Furthermore, state parties are mandated to ensure that private entities that offer facilities and services open to the public must adhere to principles of universal accessibility so that people with a variety of disabilities can use them. This is applicable to most tourist facilities since they are open to the public.

The title of article 30 is 'Participation in cultural life, recreation, leisure and sport'. This suggests that tourism and recreation are important elements in the lives of PwDs. In this sense, recreational facilities such as theatres, cinemas, museums, libraries and tourism services must be made accessible and enjoyable to PwDs (UNCRPD) as well as other stakeholders. State

parties are also mandated to ensure that PwDs have access to services from those involved in the organisation of recreational, tourism and sporting activities.

2.2.6.2 Disability Legislation in Africa

To date, very little has been written on disability in Africa, particularly on disability law and how it relates to tourism. Grobbelar-du Plessis and van Reenen's (2011) book, *Aspects of disability law in Africa*, is a compilation of articles on disability ranging from humanitarian assistance to employment equity. Topics include the rights of children with disabilities and protection of disabled people in employment. *The African Disabilities Rights Yearbook* of 2013 (Pulp, 2013) examined issues other than tourism; its main emphasis was interrogating existing laws on disability in Kenya, Malawi, Cameroon, Zambia, Zimbabwe and South Africa in relation to education and compliance with the CRPD. The fact that these works critiqued country laws on disability is testimony that legislative frameworks on disability exist in African countries, although some of these laws are not directly linked to tourism. This study focuses on such laws in Zimbabwe and South Africa.

2.2.6.3 Disability laws in Zimbabwe

According to Mandipa (2013:73), Zimbabwe still has a long way to go when it comes to the realisation of the rights of PwDs. The misconceptions and myths associated with disability are still blocking the way to emancipating this minority group. In some sections of society, it is still believed that giving birth to a child with a disability is a sign of promiscuity on the part of the mother during pregnancy. Witchcraft, curses and bad omens are also highly associated with disability to the extent that many PwDs are hidden from the public eye (Chimedza & Peters, 1991 in Mandipa, 2013). Notwithstanding this situation, sections of society now view disability differently. Some parents now realise the importance of sending their children with disabilities to school and some companies now employ PwDs.

Until 23rd September 2013 when it ratified the UNCRPD, Zimbabwe was solely dependent on the Disabled Persons Act (DPA) of 1992 as amended in 2006.

2.2.6.3.1 The Constitution of Zimbabwe

Before 2005, the constitution of Zimbabwe did not include PwDs in its non-discriminatory clauses. Clauses existed on non-discrimination in terms of gender, children and HIV/Aids but not disability (Mandipa, 2013:76). The constitution was amended in 2005 after widespread campaigns by the National Disability Board and other disability activists. The amendment included people with physical disabilities in the non-discrimination list. While this was applauded, there was a problem in that the amendment ignored all forms of disability other than physical. This meant that one could be discriminated against if one was intellectually disabled, yet the CRPD protects people with all forms of disabilities.

April 2013 witnessed the birth of Zimbabwe's new constitution that became operational on 22nd August 2013. Major improvements were made in this constitution relating to PwDs. For example, the inherent dignity of PwDs and their equal worth as human beings is specified (Mandipa, 2013). Furthermore, there is clear mention of the rights of PwDs in the new constitution. Unlike in the old constitution where disability rights were the duty of the Ministry of Health and Child Welfare and the Department of Social Welfare, the new constitution mandates all government departments and agencies to recognise the rights of PwDs, especially when it comes to being treated with dignity (Mandipa, 2013:77). The constitution was also hailed for making sign language one of Zimbabwe's official languages (Section 6). In section 22, the new constitution requires all buildings and facilities that are generally accessed by the public to be accessible to PwDs. This fits well with Article 9 of the CRPD which promotes equal access to the physical environment and transportation and other facilities so as to enable PwDs to live as independently as possible (CRPD, 1996).

2.2.6.3.2 The Disabled Persons Act

This legal instrument was passed in 1992 and amended in 1996 and falls under the authority of the Ministry of Health and Child Welfare. It provides for the protection of the rights of PwDs in

Zimbabwe. In Section 8, the Act forbids any form of discrimination on the basis of ability or lack thereof:

“8. (1) No disabled person shall, on the ground of his disability alone, be denied-

“(a) admission into any premises to which members of the public are ordinarily admitted; or

“(b) the provision of any service or amenity ordinarily provided to members of the public, unless such denial is motivated by a genuine concern for the safety of the disabled person concerned.

“(2) The proprietor of a premises referred to in paragraph (a) of subsection (1) shall not have the right on the ground of a person's disability alone to reserve right of admission to his premises against such a person.

“(3) A disabled person who is denied admission into any premises or the provision of any service or amenity in terms of subsection (1) shall be deemed to have suffered an injury and shall have the right to recover damages in any court of competent jurisdiction” (Disabled Persons Act, 1992:2).

The Act also established the National Disability Board to enforce the aforementioned principles. If this board is satisfied that certain facilities are not accessible to PwDs, it must issue an adjustment order. It is a criminal offence to fail to comply with an adjustment order as well as to deny PwDs access to premises that admit members of the public. This is indeed a positive step towards emancipating PwDs (Mandipa, 2013:82). However, the question is: Have there been instances where an inaccessible tourist facility (or any other) was issued with an adjustment order to make their facility universally accessible?

Serious criticisms have been levelled against the Disabled Persons Act. First and foremost, terminology matters in dealing with disability issues (Mandipa, 2013). The fact that it is called the ‘Disabled Persons Act’ is against the people first terminology approach. According to the Standard Rules of Equalisation of Opportunities for Persons with Disabilities (A/RES/48/96), when referring to people with a disability, the person should not be attached to the condition. The name of the Act denotes the medical approach which Oliver (1990) refers to as the personal tragedy approach. It places the problem with the person, rather than with the disabling environment. The preferred name would be ‘Persons with Disabilities Act’. Furthermore, the housing of the Act in the Ministry of Health suggests that this is an issue that requires medical intervention (Mandipa, 2013).

2.2.6.3.3 Zimbabwe Tourism Authority and disability tourism

The Zimbabwe Tourism Authority (ZTA) is mandated to enforce industry requirements as prescribed in the tourism policy. Due to the absence of an operational tourism policy, the ZTA is guided by Statutory Instrument (SI) 128 of 2005 (Grading and Standards Regulations) and Statutory Instrument 106 of 1996 (Declaration and Requirements for Registration). Section 5 of the 3rd schedule of SI 128 of 2005 provides that accommodation facilities should have ramps to enhance access to all areas of the hotel, lodge, motel or any other accommodation facility. It also provides that all hotels with 3 star grading and above must have at least two rooms for PwDs while those with two stars and below should have at least one room for disabled persons.

Statutory Instrument (SI) 106 of 1996 provides that, as a requirement for registration, all accommodation facilities should have at least one properly working and well maintained cubicle toilet to cater for PwDs. While these two statutory instruments might seem pro-disability, a closer examination reveals that SI128 of 2005 is only concerned with people with mobility disabilities, specifically wheelchair users. Nothing is said of the other dimensions of disability. SI 106 of 1996 also has simple requirements when it comes to access for PwDs. It does not specify what the toilet should contain as opposed to the Scandic accessibility standard which stipulates the position of the toilet seat, the grab bars and where toilet paper should be placed. At the end of the day, one can conclude that the provisions in the statutory instruments are too general and many establishments can make superficial changes and get away with it.

2.2.6.4 Universal accessibility and legislation in South Africa

The Republic of South Africa has adopted the following pieces of legislation that directly or indirectly affect people with disabilities:

2.2.6.4.1 The Constitution of South Africa

The Republic of South Africa's premier law is the Constitution of 1996 (Republic of South Africa, 1996). Section 9 provides for equal protection and benefit of the law and the right of all to non-discrimination. In article 9(3), the *state* is mandated not to discriminate against anyone on the basis of race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, *disability,* religion, conscience, belief, culture, language and birth (RSA Constitution, 1996). This is a vertical application, i.e., the relationship between the state and the individual. Likewise, section 9(4) pertains to the horizontal application of the right to non-discrimination. It provides that *no person* may unfairly discriminate directly or indirectly against anyone on one or more grounds including race, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, *disability*, religion, conscience, belief, culture, language and birth. These are the only two sections that deal directly with disability. However, the Constitution indirectly addresses the rights of PwDs through its Bill of Rights. The Bill of Rights provides for the rights of all citizens, not specific to PwDs; therefore, one assumes that since PwDs are citizens, they are also covered by the Bill of Rights. These rights include human dignity, life, freedom and security of the person, and freedom of trade, occupation and profession as contained in Sections 10, 11, 12 and 22, respectively, among other rights.

2.2.6.4.2 Other disability legislation

It is sad to note that South Africa does not have a comprehensive disability act that deals with matters directly relating to disability or PwDs (PULP, 2013:16). However, the country has enacted policies and acts of parliament that mention issues to do with disabilities in passing. These include the Employment Equity Act of 1998,the Skills Development Act of 1998, Promotion of Equality and Prevention of Unfair Discrimination Act of 2000, Labour Relations Act of 1998, the Mental Health Care Act and the Library for the Blind Act, to name but a few (Dube, 2005). These acts and policies seek to achieve some form of equity or equality in the way people are treated at the workplace, in the development of skills and the general and socio-economic welfare of all citizens. The disabled are included.

2.2.6.4.3 The Disability Rights Charter of South Africa

This document, written by PwDs in South Africa, clearly spells out what they expect from their government. Through this charter, PwDs demand the following: non-discrimination, self-representation, health and rehabilitation, education, employment, sport and recreation, social security, and housing and transport, among other things (Bokone Bophirima Provincial Government, 2014). Although the charter is not a law, it has informed a number of disability related acts and laws.

2.2.6.4.4 Universal Accessibility in Tourism Declaration

As a move towards implementing the UN CRPD, the South African government formulated the Universal Accessibility in Tourism Declaration. The document was guided by the provisions of the Promotion of Equity and Prevention of Unfair Discrimination Act, Act 4 of 2000, which prohibits unfair discrimination on the grounds of disability. It was also informed by the White Paper on an Integrated National Disability Strategy, released by the Presidency in November 1997 which recommends that "the Department of Environmental Affairs and Tourism, in consultation with the National Environmental Accessibility Programme and the South African Tourist Organisations must develop national norms and standards as well as monitoring mechanisms to ensure barrier-free access in the tourism industry" (Department of Tourism, Republic of South Africa, 2010).

The tourism stakeholders also consulted Section 2.2 of the UNWTO Global Code of Ethics for Tourism which states that tourism activities should respect the equity of men or women, and more particularly, the individual rights of the most vulnerable groups, notably children, the elderly, PwDs, ethnic minorities and indigenous people (UNWTO, 2005). Among other provisions, the Declaration on Universal Accessibility in Tourism (Republic of South Africa, 2012) mandates tourism service providers to:

- Provide the same choices for all consumers to ensure the full participation of PwDs, the elderly and parents with young children and ensure the protection of individual rights.

- Ensure that PwDs have equal rights of access to all tourism infrastructure (including national parks), products and services, including employment opportunities and benefits offered by the tourism industry.

- Introduce universal accessibility as a criterion in the grading of hotels and restaurants.

The declaration mandates government to undertake the following, among other things:

- Ensure that tourism master plans, policies and programs incorporate the principles of universal access to tourism infrastructure, products and services;

- Ensure that government and state owned enterprises at all levels conduct access audits of key public facilities on a regular basis and use the findings to enhance policy development and effect immediate action. The findings should be made available to the public in accessible formats.

With proper implementation, no tourism and hospitality facility in South Africa would remain inaccessible. However, the major challenge with policies and procedures, especially in African countries is the lack of an implementation and enforcement framework; hence most workshops are mere talk shows. This study sought to establish the status quo of the implementation of these guidelines.

2.3 CONCLUSION

This chapter sought to define the concepts of disability and universal accessibility and to highlight the distinction between accessible tourism and universal accessibility. It also sought to establish the legislative framework under which issues of universal accessibility are discussed at both a global and national level. This literature review revealed that the concept of universal accessibility is still in its infancy. Various approaches to understanding people with disabilities and their plight were discussed and it emerged that the social model of disability was the most relevant in today's society. The concepts of accessible design and accessible tourism have dominated; this meant that not all embodiments of disability were catered for. The most dominant forms of disability (especially mobility impairments) have been catered for with little or nothing being done for other disabilities. It is unfortunate that even at policy level, much of the regulations focused on the mobility impaired, perhaps due to a lack of understanding of the

concept of universal accessibility. This study aims to shed more light on the field of universal accessibility and to suggest ways of making national parks in Zimbabwe and South Africa universally accessible.

CHAPTER 3

NATURE-BASED TOURISM AND UNIVERSAL ACCESSIBILITY

3.1 INTRODUCTION

Nature-based tourism remains Africa's number one tourist draw card despite the growth of other forms of tourism on the continent. This chapter explores the concept of nature-based tourism especially as it relates to universal accessibility. While the previous chapter clearly revealed the significance of the disability market to tourism operators from a business perspective, this chapter is more supply side oriented and seeks to establish the state of affairs in terms of the nature-based tourism product. It also discusses the arguments for and against accessibility in natural areas, particularly national parks.

3.2 DEFINING NATURE-BASED TOURISM

Like many other tourism related terms, nature-based tourism is fraught with definitional confusion. Some authors define nature-based tourism as nature travel (Laarman & Durst, 1987) that combines education, recreation and adventure. Wight (2001), Boo (1990:11), and Mehmetoglu (2007) call it 'eco-tourism' - travelling to relatively undisturbed or uncontaminated natural areas with the aim of studying, admiring and enjoying the scenery. According to Lucas (1984:283), nature-based tourism is tourism based on the enjoyment of natural areas and observation of nature; it usually has a low environmental impact and is labour intensive and socially and economically viable. Lucas' definition introduces new aspects. While Laarman and Durst (1987) emphasise education, recreation and adventure and Boo (1990) focused on the same issues (studying and enjoyment), Lucas (1984) shifted the focus to aspects of sustainability. This is an important distinguishing factor between nature-based tourism and other forms of tourism.

Other scholars have referred to nature-based tourism as 'alternative tourism' (Gonsalves, 1987), appropriate tourism (Richter, 1987), responsible tourism or ethical tourism (Kutay, 1989:45,

Boarst, 1990), green tourism and sustainable tourism (Lane, 1990). After interrogating a number of definitions, Fredman and Tyrvainen (2010:179) defined nature-based tourism as "... travelling to and staying overnight in locations close to protected areas, forests, lakes or the sea or the countryside and participating in activities compatible with the location's natural qualities". This definition also introduces a new dimension, an overnight stay at the destination. This is important, especially when one wants to separate tourists and excursionists. In their recent book on *Game farm and hunting tourism,* Van der Merwe and Du Plessis (2014:11) appropriately place wildlife tourism in the nature-based tourism equation and note that it includes both consumptive and non-consumptive elements.

To sum up, nature-based tourism can be defined as tourism primarily concerned with direct enjoyment of a relatively undisturbed natural phenomenon with at least an overnight stay at the destination. The three recurrent themes in the definitions are (i) a visit to a natural area, (ii) experiencing the natural environment, and (iii) sustaining the natural environment. Having defined nature-based tourism, it is important to understand it from a global perspective.

3.3 NATURE-BASED TOURISM GLOBALLY

Nature-based tourism is the fastest growing segment in tourism today with demand growing faster than that in the tourism industry at large (Wight, 2001; Bell *et al*., 2008; UNWTO, 2009; Buckley, 2003; Fallon, 2000; Hall & Boyd, 2005; Mehmetoglu, 2007). Indeed, nature-based tourism has been reported to be growing three times faster than the tourism industry as a whole (WTO, 2004, cited in Hill & Gale, 2009:54). Nature-based tourism has become big business worldwide, especially due to its claims of sustainability (Valentine, 1992; Research Services, 2005:7). According to the World Tourism Organisation, approximately 10-20% of all international visitors travel for nature-based experiences (UNWTO, 2012).

Natural resources have been identified as the dominant feature when tourists decide on a destination (Van der Merwe & Du Plessis, 2014; Ferrairo, 1982:16). Ferrairo's (1982) study revealed that of 21 classes of features that influence a tourist's choice of a holiday destination, nature was among the top three. Fifty-eight percent of visitors to Australia indicated that nature was one of their major reasons for visiting the country (Buckley & Sommer, 2001:26; Tisdell, 1984:180). A survey in the United States revealed that 29 million Americans took approximately 310 million nature-based tourism trips in 1980 (Boo, 1990:3). It is further estimated that one

million people make international trips to countries with rich natural endowments (Balmford *et al*., 2009:4). Africa's connection with wildlife is well known (Luard, 1985), with over a third of Rwanda's foreign currency attributed to nature-based tourists who visit the Volcano National Park to see gorillas (Valentine, 1992).

In New Zealand, nature-based tourism is regarded as the country's key draw card for international visitors (Ministry of Tourism, 2009). In 2008 alone, two million tourists took part in nature-based activities, representing more than 11 million trips. Seventy percent of these trips were international while 22% were domestic. International tourists' propensity to participate in at least one nature-based activity has remained high and stable (Ministry of Tourism, 2009:1). In Finland, the National Tourism Board estimates that at least a third of all inbound tourists participate in nature-based tourism activities (MEK, 2009). An increase in nature-based tourism activities was also reported in Norway between 1970 and 2004 (Odden, 2008:1).

3.4 ACTIVITIES IN NATURE-BASED TOURISM

According to Ingram and Durst (1989:6), the most common activities undertaken in nature-based tourism are bird-watching, photography, wildlife safaris, camping, mountain climbing, botanical study, orchid study, butterfly collection and river rafting. Other activities identified by New Zealand's Ministry of Tourism include scenic boat cruises, scenic drives, glacier walks and views, bush walks, sky diving, snow sports, jet boating, and trekking, among many others (Ministry of Tourism, 2008). The type of activities depends on the nature of the nature-based tourism destination. For instance, most water based activities are only applicable in places where there is abundant water. Glacier walks are only possible in certain parts of the world.

Ingram and Durst (1989:6) identify two dimensions of nature-based tourism: (i) Hard nature-based tourism (also called hard adventure) and (ii) soft nature-based tourism (soft adventure). Hard adventure normally involves a high degree of physical or rugged involvement, great personal challenge and increased risk. Hard adventure activities with a nature basis or need include caving, scuba diving, trekking, white water rafting, kayaking, rock and mountain climbing, cross-country skiing, safaris, surfing, windsurfing, ballooning and ocean sailing (Tourism New South Wales, 2010:2).

With soft adventure, the level of physical involvement is moderate and there is very little personal challenge. The activities are relatively less challenging and include hiking/bushwalking, mountain biking/cycling, camping, horseback riding, orienteering, walking tours, wildlife spotting, whale watching, and river and lake canoeing and fishing (Tourism New South Wales, 2010:2).

Furthermore, the hardness or softness is determined by whether the activities are dedicated or casual on the one hand and difficult or easy on the other hand. For instance, the scientific study of butterflies can be hard tourism while a casual interest in butterflies is soft ecotourism. Research has shown that PwDs do not want to be confined to soft adventure (Jaquette, 2008). To further understand the concept of nature-based tourism and the activities undertaken, the characteristics of nature-based tourists are examined in the following section.

3.5 CHARACTERISTICS OF NATURE-BASED TOURISTS

According to Slabbert and Du Plessis (2013:4), motivation is a force within the tourist, which drives him/her to take action in order to satisfy tourism needs. Ecotourists' motivations are believed to be different from the needs of other tourists. According to Saayman, Slabbert and Van der Merwe (2009), Saayman and Saayman (2009), Kruger and Saayman (2010), Van der Merwe, Slabbert and Saayman (2011), and Bashar and Abelnaser (2011), nature-based tourists seek to be free and physically active, to escape from routine, to be nostalgic and novel, to enjoy undisturbed nature and explore new learning experiences and to spend time with family and friends. In New Zealand, 64% of nature-based tourists travel for holidays while 25% visit friends and relatives (Fredman & Tyrainen, 2010:180).

Yoon and Uysal (2005) as cited in Slabbert and Du Plessis (2013:642) categorize the above factors into pull and push factors which influence one's decision to travel. Push factors are demand oriented and include socialisation, novelty and adventure, dream fulfillment, relaxation and rest, and fitness and health, among others (Dann, 1977; Iso-Ahola, 1982; Uysal *et al*., 1994; Wang, 2004; Jang & Wu, 2006). Pull factors are more supply driven and make travelers realize their need to travel. Slabbert and Du Plessis (2013) classify pull factors into the following three categories:

- Static factors - these are not easily altered and include history and culture, climate, distance and landscape.

- Dynamic factors - these may change from time to time and include accommodation and catering services, entertainment, personal attention, trends in tourism and the political situation.

- Current decision factors - these refer to the current situation, e.g., marketing strategies, prices and value for money.

Table 3.1 below summarizes the travel motivations for nature-based tourists and the appropriate demographic aspects of these motivations.

Table 3. 1: Travel motives and demographic aspects of nature-based tourists

Author/Title	Travel motives	Demographic Aspects
Weaver and Lawton (2002) *Overnight ecotourist market segmentation in the Gold Coast winter land of Australia*	-Harder • Strong desire to learn • Enjoy visiting wild & remote destination challenges • Backpacker accommodation	• Younger • Highly educated • High income
	-Softer • Less committed to the environment • Nature settings • Accommodation with good service	• Travel with family • Highly educated • High income
	Structured (blend of hard & soft) • Committed to environment	
Weaver (2002) *Hard-core ecotourist in Lamington National Park,*	-High level of service and facilities -High levels of environmental commitment • Supports sustainability • Physically active and challenging experiences • Demand fewer services • Active in search for information	• Travel in small groups • Take longer trips
Kwan, Eagles and Gebhardt (2008) *A Comparison of Ecolodge patrons' characteristics*	Budget • Meet people with similar interests • Visiting friends and relatives	• Least educated • Long trips • 16-35 age group

and motivations based on price level: A case study of Belize.	• Value for money	
	Mid price • Warm climate • Natural settings • Family togetherness • Visiting friends and relatives • Seeing as much as possible • Being physically active • Value for money	• 36-55 age group • Middle educated • Employed full-time
	Upscale • Being together as a family • Quality of environment	• 36-55 age group • Educated • Employed full-time
van der Merwe, Slabbert and Saayman (2011) *Travel motivations of tourists to selected marine destinations.*	Family experience • Destination attractiveness • Escape and relaxation • Time utilisation • Personal attachment	• Average age is 38 • Married • Well educated
Saayman, Slabbert and van der Merwe (2009) *Travel motivation: A tale of two marine destinations in South Africa.*	Relaxation • Destination attractiveness • Socialisation • Personal attachment • Site attributes • Trip features	• Aged between 37 and42 • Married • Well educated • 8 night stay

Adopted from Slabbert & du Plessis (2013: 644)

A study by Fredman and Tyrainen (2010:181) revealed that the majority of nature-based tourists prefer to travel alone. In 2008, 34% of international nature-based tourists travelled alone, while 31% travelled with a partner or spouse. Among domestic tourists, 36% travelled with family, 18% with friends and 17% with their spouse. The case is different with tourists with disabilities and the aged. The mere fact that they have some form of impairment makes travelling alone difficult. Most PwDs therefore travel in the company of friends, partners or assistants (Jaquette, 2008; Lais, 1992).

When it comes to the length of stay, a study of nature-based tourists in New Zealand revealed that nature-based tourists stay slightly longer than other international tourists (Fredman & Tyrainen, 2010). In terms of expenditure at the destination, nature-based tourists spend an

average of $3 040 compared with $2 680 by ordinary tourists. In 2001, approximately 966 000 nature-based tourists spent a total of about $909 million in British Columbia (Tourism British Columbia, 2005). However, the expenditure per day is almost the same as that of other tourists ($130.00) and the increase in total expenditure could simply be the result of a prolonged stay. Fredman and Tyrainen, (2010) also found that nature-based tourists are less conventional and are comfortable with less luxurious accommodation. The majority (47%) preferred hotels while others preferred private accommodation (40%) and motels (30%).

In order to better appreciate nature-based tourism and its economic benefits as well as its implications for universal accessibility; it is important to consider the problems associated with this type of tourism. This will also assist the researcher in formulating a framework for universal accessibility in national parks.

3.6 PROBLEMS OF NATURE-BASED TOURISM

While nature-based tourism has been hailed as the most sustainable form of tourism by some scholars (Balmford, 2009; Hall & Boyd, 2005), others think differently. According to Valentine (1992:3), the assumption that nature-based tourism is inevitably environmentally friendly is far from the truth. Even so-called non-consumptive wildlife tourism leaves unintended tracks.

3.6.1 Disturb wildlife peace and influence wildlife behaviour

Harmless as they may seem, at times wildlife watchers have negative effects on animals. For example, in Hawaii and Queensland, whales were harassed to the extent that legal controls had to be put in place (Valentine, 1992). The fact that very little is known regarding the wildlife's tolerance of human contact means that any human presence in the wild may affect these animals.

According to Orams (2002:284), human presence in the wild influences the behavior of predators especially in African game parks. The long hours, that tourist vehicles spend stationery in the wild have an effect on large mammals and predators especially on their eating

and hunting behavior. In the Serengeti national park, cheetahs have been robbed of their meals by hyenas during vehicles' stationary times (Knight & Gutzwiller, 1995:51-52).

3.6.2 Environment degradation

The mere presence of humans is a threat to vegetation, the soil and water sources (Valentine, 1992). The difficult question is: how many tourists are enough? With the increase in income from nature lovers, management is usually tempted to expand. However, this is not a viable option if nature-based tourism is to remain sustainable. In California, Buttery Trees Lodge lost all its glamour after all the overwintering butterflies were lost due to the expansion of lodging units (New, 1987:30). The butterflies never returned; therefore expansion was fruitless. Another notable example is that of the Annapurna region of Nepal. The highlands lost their grandeur due to the number of tourists which caused, among other things, massive littering until the once beautiful highlands became an eye sore (Brown *et al.,* 1997). Environmental degradation has a bearing on universal accessibility since the more accessible a destination is, the more it is likely to attract tourists.

3.6.3 Community and social impacts

There has always been resentment of nature-based tourism by local communities in developing countries. This has mainly been because these communities are extremely poor, yet they witness affluent foreign tourists enjoying themselves (O'Grady, 1990). According to Mishra (1984:201), foreign tourists are seen as having no concern for local people and their problems, e.g., wildlife inflicted deaths and crop destruction. In Dudhwa National Park in India, 93 people died as a result of attacks by tigers over a period of four years. The situation is further exacerbated by the fact that the authorities pay compensation of Rs5 000 per death (US$80) compared with the Rs50 000 (US$820) fine for killing a tiger. This creates the impression that nature-based tourism is the preserve of self-centered tourists.

Closely linked to this issue is benefit leakages. According to Lusigi (1984:141), very little of the money generated by nature-based tourism is spent locally. Local people often do not have the requisite skills and competences and are employed in menial jobs. The senior, well-paid positions go to outsiders. However, it is important to note that the benefits enjoyed by local people are highly dependent on the manner in which tourism is structured in a particular country. Tourism that is controlled at grassroots level tends to benefit local communities. Table 3.2 below itemises other negative impacts of tourists in national parks.

Table 3. 2: Negative impacts of nature tourists in national parks

Factor	Impact on nature	Effects on experiences
Crowding	Environmental stress, animals show changes in behavior	Irritation, displacement
Development	Built structures intrude on visual quality	Reduced aesthetic value
Roads and tracks	Habitat loss, drainage change, barriers to animals	Aesthetic scars
Access for motor vehicles, powerboats, pedestrians	Disturbance to animals, loss of quiet, trail erosion, disturbs wildlife	Noise pollution, loss of wilderness, intergroup conflict, aesthetic impact

Antisocial activity (noise, radios, litter)	Interference with natural sounds, impairment of scene, habituation of wildlife to garbage	Irritation Aesthetic loss, health hazard
Vandalism	Mutilation	Loss of natural beauty
Vehicle speeding	Wildlife mortality, dust	Aesthetic value, reduced safety concerns
Driving off-road and at night	Soil and vegetation damage, disturbance to wildlife	Loss of wilderness, disruption of wildlife viewing
Feeding animals	Behavioural changes, poor diet	Danger to tourists
Souvenirs and wood collection	Removal of natural attractions, disruption of natural processes, loss of habitat	Perceived inappropriate behavior in national parks
Powerlines	Destruction of vegetation, erosion	Aesthetic impacts

Source: Thorsell and McNelley (1988) in Valentine (1992:116)

3.7 ECONOMIC ARGUMENT FOR NATURE-BASED TOURISM

While it is true that nature-based tourism has become the buzzword in the tourism vocabulary in recent years, it is important to examine its viability. Many discussions of nature tourism fail to include real figures to assess its economic significance (Eagle, 2010). This is particularly so with park management (Van Sickle & Eagle, 1998; Wells, 1997). The economic impact of nature-based tourism is not well known, poorly documented and rarely communicated (Eagle, 2010: 133).

Much emphasis is placed on ecology and this is regarded as the rationale for a park's existence. However, Lindberg (1998) and Wels (1997) argue that nature tourism is becoming increasingly important due to its contribution to local and national economic development. Natural experiences command a premium price (Valentine, 1992). In other words, with nature-based tourism, it is possible to demand high rates without tourists complaining. In Bhutan, a 'high value, low volume' policy was adopted, where a maximum number of tourists (2 400) was set and these tourists were expected to spend at least US$200 per day per person (Dixit, 1989:4).

Furthermore, the mere fact that nature-based tourism is highly specialised makes it economically viable. For example, a butterfly watching trip is generally more expensive than another type of holiday. The following cases cited in Valentine (1992:116-118) reveal how viable nature holidays are. In 1990, Peregrine Bird Tours ran a 27-day tour to Nepal at a cost of AU$7 572 per person, an amount which would hardly be spent by an ordinary tourist in the same period. In the same year, specialist nature trips to Arizona cost around AU$3 700 for two weeks, excluding air fares. A similar example is an African wildlife trip which cost over AU$4 000 for two weeks, excluding air fares.

At the extreme end, eight tourists paid US$35 000 each for a three-hour Atlantic Airways flight to land briefly at the South Pole. This illustrates how powerful nature is in opening tourists' wallets. An important characteristic of nature-based tourism is that nature tourists are generally more accepting of conditions different from home than other tourists (Boo, 1990:13). This discussion shows that nature-based tourism pays.

In Canada, the parks system contributes an average of C$ 500 (approx. ZAR5 000) million to provincial GDP each year. An additional C$670(ZAR6 700) million was realized indirectly from nature tourism (Cooper & Lybrand Consulting, 1995:3). If one combines the US and Canada, the value of nature-based tourism ranges from US$236 to US$370 billion. In Rwanda, the mountain gorillas have brought in enough funds for environmental conservation. It seems tourists are willing to pay more for a good nature-based tourism experience. Globally, 20% of international travel is nature-based (EBSCO Sustainable Watch, 2009). This generates US$77 billion in revenue and accounts for at least 5% of the global travel and tourism market.

Nature tourism has benefits other than those that can be measured in dollar terms. These include job creation, infrastructure development and community wellbeing. In the British Columbia province of Canada, parks generated 9 100 direct and indirect jobs in 1999 alone (MWLP, 2001). In Africa south of the Sahara, national parks play a pivotal role in nature-based tourism due to the region's abundant wildlife. If these parks are made universally accessible,

great economic gains are likely to result. However, many countries have not yet realized the full potential of the nature-based tourism market, perhaps because of ignorance of the economic value of such a market (Brockelman, 1988; Hall & Frost, 2010).

National parks make a significant contribution to nature-based tourism and thus tourism arrivals and revenue in Africa, especially South Africa and Zimbabwe. The following section examines national parks.

3.8 NATURE-BASED TOURISM AND NATIONAL PARKS

There is a symbiotic relationship between nature-based tourism and national parks, especially in Southern Africa. The section below provides a background of the national parks concept.

3.8.1 Brief history of National Parks

Globally, the total area under parks is 32 million square kilometers, from 193 countries (UN, 2014:2). This area accounts for 8.84% of the earth's total land area and is spread over 225 countries (Green & Paine, 1997). The term, national park was developed in the early 1870s in America (Hall & Frost, 2010). For a long time, it was used without understanding its conception. The initial concept of national parks was the brainchild of an 1870 expedition to the Yellowstone area of western US. The team of travelers was astonished by the scenic beauty of the vast area and thought it wise that it be preserved for public enjoyment (Hall & Frost, 2010). Initially, expedition members envisaged partitioning the area and selling it to individuals for tourism businesses but one member felt that this was not sustainable. They later unanimously agreed that it should be owned by the government and developed for public enjoyment (Langford, 1905; Nash, 1970).

From these small beginnings, other places of scenic beauty fit for the public were designated national parks. Even urban recreational leisure places were named national parks (Hall & Frost, 2010). Parks became recognised as the 'lungs of the city' in the sense that they provided a retreat from the madding crowd and massive industrialization. In other words parks at that time had very little to do with conservation and everything to do with public health and recreation.

The same idea was adopted in Australia, England and Wales (Stanley, 1977). Recreation was the main thrust of national parks (Parks and Access to the Countryside Act, 1994, (5) 1).

After the Second World War (1939-1945), the concept of national parks started to change. To Dower (1945:6), a national park was "an extensive area of beautiful and relatively wild country in which, for the nation's benefit and by appropriate national decision and action:

- The characteristic landscape beauty is strictly preserved;
- Access and facilities for open air enjoyment are amply provided;
- Wildlife and buildings and places of architectural and historical interest are suitably protected while,
- Established farming use is effectively maintained.

The International Union for the Conservation of Nature (IUCN) offered an alternative definition:

> *A national park is a protected area managed mainly for ecosystem protection and recreation. It is a natural area of land and/sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations (b) exclude exploitation or occupation inimical to the purpose of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible (IUCN, 1994).*

This definition extends the purpose of national parks from the mere preservation of beauty and public enjoyment to ecosystem conservation and protection and offering visitors spiritual, educational and scientific benefits.

3.8.2 Development of National Parks

National parks developed in three phases. The first was at the end of the 19th century when the US and some English speaking colonies adopted the concept. Secondly, in the first half of the 20th century Europe came on board with countries like Sweden, Italy, Romania, Greece, and Spain establishing national parks. Interestingly, the European power houses, i.e., Britain and France did not embrace the concept at this point. Instead, they introduced it to their African and

Asian colonies. The third phase is represented by the period after the Second World War (1939-1945) when the idea of national parks spread globally like wild fire. Almost all countries had at least one national park and it was at this stage that these parks became recognized for conservation and their ecological benefits, in addition to the aesthetic and recreational perspective (Hall & Frost, 2010). It is should be noted that, while the idea of national parks was mooted by the USA, there was no prescription in terms of how individual counties implemented it (Hall, 1988b).

3.8.3 National parks in developing countries

National parks began to develop in Africa and Asia after the Second World War (1939-1945); the primary reason was wildlife protection (Hall & Frost, 2010). The pace of national park development was determined by the colonial masters, especially Britain. For example, the British Society for the Preservation of the Wild Fauna of the Empire (later renamed the Fauna Preservation Society) had elite members who included the Secretary of State for the Colonies. These powerful organizations heavily influenced the direction of park development in British colonies. They worked with influential Americans like the Crockett and Boone Club to champion the establishment of national parks in Africa and Asia. In 1933, the London Conference on African Wildlife resolved that national parks and sanctuaries were the best way to preserve wildlife. After the Second World War, most African and Asian countries gained independence and the newly independent nations readily embraced the idea of national parks.

3.8.4 National Parks in Africa

For decades, overhunting and poaching by local people and some foreigners have been a major threat to wildlife conservation in Africa. The first body responsible for wildlife protection in Africa was the Natal Game Protection Association of 1883 in South Africa. In 1894, President Paul Kruger supported the establishment of the Pongola game reserve. These two initiatives laid the foundation for a wildlife protection system in Africa (Hall & Frost, 2010). Thus South Africa set the tone for wildlife protection in the continent.

After the First World War (1914-1918), Belgium was the first country to establish a national park in Africa when it established the Albert National Park in its colony, the Congo, in 1925. The major thrust of this initiative was to protect the Silverback gorilla (Jespson & Whittaker, 2002). In 1926, Kruger National Park was established in South Africa. The conceptualization of these parks was completely different from that of the Yellowstone National Park in that the main thrust was the preservation of African flora and fauna (Hall & Frost, 2010). At one point, some thought of getting rid of the ferocious predators such as lions and leopards but it was realized that visitors actually came to see them (MacKenzie, 1988; Carruthers, 1995a).

After the Second World War, Kenya, Tanzania and Uganda established national parks. In 1939, the British government, which at that time still controlled many African colonies, appointed a Game Committee to study and make recommendations on the establishment of game parks in other African countries; this resulted in the establishment of many more parks in Africa.

3.9 NATIONAL PARKS AND TOURISM

A close reading of the 1870 ‘campfire discussion’ (Langford, 1905) shows how important tourism was in the establishment of the very first national park in the world, Yellowstone National Park in the USA. The expedition crew realized that the scenic wonders they had discovered were of great commercial value and foresaw a situation where overdevelopment would make it less attractive over time (Hall & Frost, 2010) (this is exactly how the Niagara Falls lost its glamour). They were certain that the Yellowstone National Park would draw many tourists. With the spread of the national parks concept, how do other regions fare with regard to national parks and tourism? The section below provides a glimpse into national parks and tourism in the Southern African context.

3.9.1 National Parks and Tourism in Southern Africa

According to Zaradic and Pergams (2007), nature-based tourism is estimated to generate more revenue than farming, forestry and fisheries combined in southern Africa. Of all the nature-based tourism products, national parks are Southern Africa’s most common product. According to Eagles (2010), the term national parks, is closely linked to nature-based tourism to the extent

that some use it as a synonym for ecotourism. Some tourism operators use the term to promote their offering to eco-tourists (Eagles & Wind, 1994). An important element of nature-based tourism, the absence of which makes the term nature incomplete, is fauna or wildlife (Tourism New South Wales, 2012:2). Wildlife tourism is an important subset of nature-based tourism in which there are high levels of domestic and international interest (Tourism New South Wales, 2012:3). It involves travelling to observe wildlife in natural environments, preferably in their native habitat as well as understanding different animal and bird species. This critical element is housed in the national parks, making them an indispensable part of the nature tourism industry. However, national parks are however not restricted to wildlife (fauna); they are also home to different plant species such as the flame-lily, protea, baobab and welwitchia which are also a great attraction to many domestic and international nature-lovers.

3.9.2 Tourism and National Parks in South Africa

South Africa is a haven for nature tourists due to its vast natural endowments. The country's protected areas attract those who love the Big Five, birdwatchers and nature lovers in general (Hall & Frost, 2010).

The national authority responsible for wildlife management in South Africa is South African National Parks (SANParks). SANParks owns slightly more than half of South Africa's protected areas, including the two giant national parks, Kruger and Kgalagadi. The first national park in South Africa was located in the Drakensberg area of KwaZulu-Natal. In 1903, 8 000 hectares of land near Giant's Castle was earmarked for tourism as a game reserve. This was later named the Natal National Park (Perry, 1929:9-10; Carruthers, 1995a:53). Surprisingly, today KwaZulu-Natal does not have a protected area managed by SANParks beside of the pace setting role it played.

Kruger National Park was established in 1926 and combined two game reserves in the then Transvaal Colony. This was the same time that the National Parks Board of trustees (now SANParks) was established. At this time, the term park was not very palatable to most conservationists since it had connotations of leisure and recreation as opposed to conservation (Hall & Frost, 2010). The word 'national' was however more acceptable especially after the Second World War because it was closely related to democracy. The term 'national park' therefore became closely related to sovereignty and was a selling point.

There has been a conflict in national park management between conservation and tourism. The conservationists argue that national parks are primarily meant for ecological preservation while the tourism advocates argue that there is a cost to conservation and that this has to be covered by the proceeds from tourism (Hall & Frost, 2010). According to Hector Magome, a senior manager at SANParks, "…in order to survive, SANParks must make money…" (Magome, 2003 in Hall & Frost, 2010:245). "…Indeed, in the case of national parks, it is not possible to disentangle biodiversity conservation and human use, because without the one, you do not have the other..." note Fearnhead and Mabinda, (2003:186). They argue that, despite the fact that people do not want to associate conservation and money, the two are intertwined. While the biodiversity component consumes funds, the tourism component is a source of funds. Interestingly, in South Africa, the conservation and tourism components are in the same cabinet portfolio, the Department of Environmental Affairs and Tourism (DEAT).

Today, South Africa has 20 national parks: Groenkloof, Kruger, Table Mountain, Marakele, Golden Gate, Camdeboo, Mountain Zebra, Addo Elephant, Garden Route National Park (Tsitsikamma, Knysna, & Wilderness), Bontebok, Agulhas, West Coast, Karoo, Namaqua, |Ai-|Ais/Richtersveld, Augrabies, Kgalagadi, Mapungubwe, Tankwa Karoo and Mokala (South African National Parks, 2014). The question is: are these national parks universally accessible? This study sought to answer this question by conducting a case study of four South African national parks: Addo, Kgalagadi, Marakele and Mountain Zebra.

3.9.3 National Parks and Tourism in Zimbabwe

Like South Africa, Zimbabwe is blessed with a diversity of natural attractions which range from the majestic Victoria Falls to the Big Five (Elephant, Lion, Leopard, Buffalo and the Rhino) (www.zta.co.zw). The Big Five are housed in the many national parks, sanctuaries, and game reserves around the country. Hwange National Park was the first to be established in 1928, as a game reserve. In 1949, after the passing of the National Parks Act, Hwange was upgraded to become the first national park in the country (Zimbabwe Parks and Wildlife Management Authority (ZimParks), 2014). The then Rhodesia Game Section was formed in 1952 and later became the Department of National Parks and Wildlife Management in 1964. Today, it called the Zimbabwe Parks and Wildlife Management Authority (ZPWMA), commonly known as ZimParks.

In 1975, the Parks and Wildlife Act was enacted. This marked a change of philosophy in as far as wildlife management is concerned because the Act shifted ownership of wildlife from the state to the owners of the land upon which the wildlife lives. In other words, if one has a piece of land and that land has wild animals, the animals on that piece of land become his/hers. This changed perceptions of conservation. The fact that the animals are now theirs made people view them as an asset rather than a nuisance or a quick meal (ZimParks, 2014).

Under the 1975 Act, state owned land was to be protected and utilised at various levels. A system of Recreational Parks, National Parks, Sanctuaries and Botanical Gardens was put in place in order to avoid haphazard and irresponsible hunting of animals. Each has its own target market of tourists, both locally and internationally. From time to time this Act has been amended to allow for new developments in wildlife protection systems. It is very important to note that the Parks and Wildlife Act of 1975 impacted not only Zimbabwe; it also had a serious impact on the rest of Africa and the world in the sense that it was also adopted by other countries as they came up with their own acts (ZimParks, 2014).

Based on the provisions of the 1975 Parks and Wildlife Act and the fact that the majority of Zimbabweans live in rural areas (Census, 2012), the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) was instituted. The first step was granting rural council status to all communal areas that harbor significant wildlife resources and those that border national parks. Through CAMPFIRE, local people were given an opportunity to manage their own resources and accrue significant economic gains. The CAMPFIRE model has also been adopted by other African countries and is slowly gaining momentum in Asia and South America. As already alluded to, it is important to note that the CAMPFIRE program thrives best in areas that boarder national parks.

Zimbabwe's most renowned national parks are Hwange, Mana Pools, Victoria Falls and Gonarezhou National Parks. Matobo and Nyanga National Parks are also well-known especially by the British because they house the legacy of Cecil John Rhodes. Many other less well known gems also exist in Zimbabwe. Apart from the majestic Victoria Falls, statistics show that national parks are the second best tourist draw card in Zimbabwe (ZTA, 2012).Today Zimbabwe has 11 National parks which are Victoria Falls, Mana Pools, Zambezi, Hwange, Chizarira, Gonarezhou, Chimanimani, Nyanga, Kazuma, Matobo and Matusadonha (ZimParks, 2014). Again the question remains: are these national parks accessible to people with disabilities? Case studies of Hwange, Mana Pools, Gonarezhou and Victoria Falls National Parks were conducted to

answer this question. However, is there a need to make these national parks universally accessible in the first place? The following section addresses this issue.

3.10 NATURE-BASED TOURISM AND UNIVERSAL ACCESSIBILITY

Like other tourist segments, PwDs are greatly interested in exploring nature (Lais, 1992:14). According to McAvoy *et al.* (2006:2), having a disability by no means precludes someone from visiting the wilderness. Research has shown that PwDs participate in nature-based tourism for the same reasons as their so-called able-bodied counterparts (Yau *et al*., 2004; Lais, 1992; Roggenbuck & Driver, 2000; Brown *et al*., 1999). These include escaping the mundane, relaxation, enhancing family interactions, experiencing natural beauty, taking photographs, and seeking leisure, education and therapy (Shi *et al*., 2012:229-231; Singer & McAvoy, 1992; Saayman, Van der Merwe & Slabbert, 2009; Slabbert & Du Plessis, 2013).

However, PwDs have other motivations over and above those of ordinary tourists. The most commonly noted reasons for visiting a wilderness environment include the need for personal challenges, to increase self-confidence and social adjustment, family satisfaction and to enhance self-understanding (Anderson *et al*., 1997; McAvoy *et al.,* 1989; Scholl *et al.*, 2003; Singer & McAvoy, 1992). One blind tourist had this to say regarding self-confidence and the personal challenges posed by the wilderness experience:

> *"It was probably one of the best things I have ever done in regards to building my confidence and really stepping out on a personal ledge for me…And I think it has given me a lot more confidence to take on some of these really out-on-the-edge things; and just kind of say I did this so it makes me think that I can probably do anything I put my mind to"* (from McAvoy, 2006:30).

Janet Zeller, a quadriplegic who is wheelchair bound points out that, visiting natural areas fills a chasm in her soul and after visiting natural places, she feels less disabled than before. According to her, the peace and harmony in nature is so soothing and one cannot get it anywhere else (Zeller, 1992:45). These experiences and comments by PwDs show that they have a great thirst for nature.

Shi *et al*. (2012:229) identify another reason why PwDs visit various areas of interest, including natural areas. They introduced the ‘’do it today’’ syndrome where tourists with disabilities are not sure of what tomorrow holds for them so they decide to enjoy the best of today. This is perhaps vindicated by the fact that these people already suffer impairments which are likely to worsen with age.

Studies by Anderson *et al*. (1997), McAvoy *et al*. (1989), Scholl *et al*. (2003) and Stringer and McAvoy (1992) reveal the transference effect of nature-based tourism on the day to day lives of PwDs. These include increased self-confidence, increased likelihood to pursue new challenges, increased appreciation of diversity, increased self-efficiency, increased leisure skills, self-understanding, and awareness of one’s capabilities, increased self-directed activity and spiritual benefits.

When they visit natural areas, PwDs engage in activities that include sightseeing, bird-watching, camping and hunting (among others) (McAvoy *et al.,* 2006:24; Cordell, 1999; McCormick, 2001). McCormick’s research reveals that the level of participation of PwDs in outdoor recreation in the US equals, and at times exceeds that of able-bodied tourists. This observation is supported by Bricker (1995) whose study revealed that PwDs under 65 years of age participate in primitive camping more than their non-disabled counterparts. Primitive camping, unlike modern camping, involves camping where there is no running water or electricity, away from vehicles and without caravans. Some tourists with disabilities engage in even more challenging activities than their able-bodied counterparts (Anderson *et al*, 1997; McAvoy *et al*., 1989; Robb & Ewert, 1987). McCormick (2000) found that PwDs under the age of 25 and over 75 participate more in outdoor swimming than their able-bodied peers. He further confirmed that apart from rock/mountain climbing, PwDs spend more time on adventure than those without disabilities (McCormick, 2000:23). This shows that PwDs are by no means spectators when it comes to nature-based tourism.

Despite the fact that PwDs are interested in nature-based tourism, the number of disabled tourists at national parks and worldwide has not been impressive (UNCRPD, 2006). This is despite the statutory instruments put in place by some governments to encourage disability tourism. In 1994, only 2.3% of park users in the US were mobility disabled regardless of the fact that 14.4% of the US population was mobility impaired (Bricker, 1995:11; Lais, 1992). This may be an indication of the high inaccessibility of the national parks in that country, which could also be the case in Zimbabwe and South Africa.

The major debate regarding accessibility of natural areas has been how to strike a balance between enhancing accessibility and maintaining the natural state of the wilderness environment (Ray, 2003; Lovelock, 2010; Jaquette, 2005). The use of cars and other electrical devices to enhance access (industrial tourism) has been regarded as a primary threat to national parks and the wilderness experience. It makes access to nature too easy and is environmentally damaging (Bricker, 1995).

The major question is: how can access be enhanced while keeping the national parks attractive? (Bricker, 1995:1). Advocates for environmental sustainability have argued that any change in the ecological set-up to accommodate the mobility impaired compromises the quality of the very nature which draws these tourists (Noss, 1991:120; Lovelock, 2010). On the other hand, those that subscribe to the philosophy of universal access argue that it is an infringement on the rights of PwDs to deny them access to these natural areas on the basis of sustainability (McAvoy, 1989; Zeller, 2008:2; Jaquette, 2005; Lais, 1992). Their argument is that, motorised access to national parks must be allowed to cater for the mobility impaired and the aged (Lais, 1995). The following quotes from persons without and with disabilities reveal the intensity of the debate. “I don’t want to lose the wilderness, rather than having the wilderness adapt, I would rather see persons with disabilities adapt” says a non-disabled respondent. Another respondent argues “Widen and reroute the grade of trails, people with disabilities have a right to visit their forests” (Bricker, 1995:3). Given the increasing number of PwDs seeking the wilderness experience and upcoming legislation that emancipates PwDs, what will remain of those who argue against universal accessibility?

Environmentalists have argued that allowing motorized access would deny everyone (including the disabled) a true wilderness experience (Noss, 1991; Bricker, 1995). Indeed, tourists with mobility impairments themselves argue that they do not necessarily want to make natural areas too easy to access. All they want is that these parks are universally accessible to afford them the experience and challenges that able-bodied people experience (Zeller, 2008). What they are against is the total inaccessibility of these places which is tantamount to exclusion. Environmentalists seem to put unwarranted emphasis on the exclusion of motorised/mechanised devices like wheelchairs in parks (Lovelock, 2010). However, the Americans with Disabilities Act title V, Section 507c provide for the use of wheelchairs for individuals whose disabilities require their use (ADA, 1990). The argument is that, a wheelchair is not an enhancement of motorisation of parks; it is, in essence, somebody’s footwear and

should be allowed in parks just as somebody's shoes are (Zeller 2008:17). Jaquette (2005) notes, that making parks more accessible would not necessarily make them more visibly constructed; therefore there is nothing wrong with making wilderness accessible.

A few studies have been conducted to determine the perceptions of tourists themselves of the use of motorized access to natural environments (Zeller, 2008; Lovelock, 2010). The results of the surveys show that it is in the interests of both the able-bodied and the disabled to ensure that the pristine nature of the wilderness remains untainted by modernity. While some mobility impaired tourists supported enhanced motorised access, the majority did not feel that there should an increase in motorized access to natural areas. It is important to emphasise that PwDs also enjoy the novelty of nature and do not want that nature to lose its originality (McAvoy *et al.,* 2001; Brown, Kaplan & Quaderer, 1999). Be that as it may, they still want the wilderness to be accessible enough to enable them to enjoy the natural experience that the able-bodied do.

Access to tourist areas by PwDs has thus far been concerned with the built environment and researchers have investigated ways to make natural areas more accessible (Mace, 1991; Darcy 2000, 2010, 2013; Buhalis & Darcy, 2011). However, there is a paucity of research on the accessibility of national parks, among other natural areas (McAvoy, 2006; Lovelock, 2010; Lais, 1995; Jaquette, 2005; Lovelock, 2010). People with disabilities have been referred to as 'outsiders' when it comes to national parks for the simple reason that such environments have been deemed unsuitable for them (Matthew & Vujakovic, 1995). Some managers of remote areas do not accommodate disability because of the costs involved. They are therefore reluctant to invest in this emerging market and relegate PwDs to the periphery (Lovelock, 2010).

The above review has, however, revealed that PwDs are an emerging and potentially viable market segment for nature-based tourism. The problem is therefore not whether disabled people wish to engage in nature-based tourism but rather the extent to which suppliers of the nature-based product are willing to make their facilities universally accessible. Indeed the fact that PwDs seem to be denied access to natural environments makes contact with nature even more precious to them (McAvoy 2006:365).

3.11 CONSTRAINTS FACED BY TOURISTS WITH DISABILITIES

People with disabilities have encountered a number of constraints or barriers as they seek to participate in tourism in general and nature-based tourism in particular (Bi, 2006; Card, 2007). These barriers can be categorized into eight classes: economic, lack of knowledge, attitudinal, lack of training, architectural, transport, communication and the discomfort associated with dealing with PwDs. Ross (2002:151) classified these barriers into three: attitudinal, resource and programme oriented barriers while Snyman (2002:43-54) summarised them into intrinsic, environmental and interactive. The eight barriers are discussed in turn.

Economic

People with disabilities need more money when travelling than their able-bodied counterparts. The need for accessible transport carries additional costs. The same applies at times to accessible accommodation which is usually deemed special and hence expensive (Snyman, 2002). Many PwDs do not travel alone. They travel in the company of partners or spouses and this doubles the cost (Darcy & Durawalla, 1999). Thus economic constraints are the major hindrance to travel by PwDs.

Lack of knowledge

Ignorance comes in two forms, the first being the lack of information by PwDs on where and how to get accessible tourism products, especially accessible national parks (Buhalis & Law 2008; Eichhorn *et al.,* 2008). In some cases, the available sources of information are either not accessible or are too poor quality to allow for informed travel decisions. Lack of knowledge by service providers of the accessibility needs of PwDs is the second facet. According to Snyman (2001), many service providers purport to know what PwDs want, yet their knowledge is too abstract. In some cases, the definition of accessibility is confined to mobility impairments and this leaves the blind, deaf and other forms of disabilities unattended (Cavinato & Cuckovich, 1992).

Attitudinal barriers

According to Fishbein and Ajzen (1995) cited in Ross (2002:151), attitudes are a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object. These include the attitudes of PwDs themselves as well as the attitudes of hospitality employees and others. They include prejudice, ignorance, fear, insensitivity, bigotry, stereotyping, misconceptions, discrimination, dislike, insecurity, discomfort, tension and intolerance (Parks, 1985 in Snyman, 2004:45).

Negative attitudes have contributed significantly to making many destinations inaccessible to PwDs (White Paper on Integrated Disability Strategy, SA, 1997). Paternalistic behavior has caused many PwDs to dislike travelling, especially to national parks (Buhalis & Darcy, 2011). Paternalistic behaviour involves showing excessive pity for PwDs and offering then unnecessary and unwanted assistance just because they have a disability. At times excessive praise is given when a person with a disability achieves something. This gives the impression that PwDs are incompetent and dependent upon charity and assistance.

Lack of training for employees

Some schools of thought believe that the main cause of ill treatment of PwDs by employees is not necessarily attitudinal but hinges on a lack of training (Turco et al., 1998:82). Their study emphasized the need for airline staff to receive thorough training on the needs of PwDs. The White Paper on Integrated Disability Strategy (SA, 1997) concurs and recommends that training be taken seriously if tourism organizations are to give a quality service to PwDs.

Architectural barriers

Despite the ‘noise’ about accessibility, the majority of facilities in both the built and natural environment remain inaccessible worldwide (Smith, 1987:382). An example is beaches that are not accessible to wheelchair users. The same applies to most national parks globally (UNESCAP, 2002). Architectural barriers include narrow passages, unfriendly restrooms and bathrooms, and steep or rugged trails, stairs or steps. At times these barriers are a result of ignorance on the part of planners. They may lack the technical knowhow and specific requirements of PwDs (Bricker, 1995; UNESCO, 2002). For instance, wheelchair users require

at least 32 inches of clearance but some trails in national parks are not more than two feet. Bricker (1995) argues that physical barriers are at times the result of property developers' unwillingness to make their facilities accessible. Property managers generally have very little or no knowledge of the benefits of making their facilities more accessible to PwDs. According to Rains (2004), the time has come for designers to shift from accessible design to universal design even in national parks.

Transport barriers

The fact that the existing transport system is not compatible with the principles of universal accessibility remains a barrier to the participation of people with different disabilities in tourism activities, particularly off the beaten track. Transport barriers affect not only those with permanent disabilities; they also affect children, the aged, pregnant women, and those with injuries (ELTIS, 2001). Transport barriers do not only apply to road transport, but to air travel as well (Snyman, 2002). Despite recent improvements in air transport, tourists with disabilities still face problems when flying:

- Wheelchair uses have serious problems boarding and disembarking and when using aircraft ablutions.
- Among many other challenges, the blind battle to identify and collect their baggage.
- For the crippled, a long haul trip in economy class is a painful experience due to the stiffness of their limbs.
- It would be ideal for tourists with disabilities to use their own vehicles when travelling, but few PwDs own a car.
- Buses are usually not compatible with PwDs.
- Accessible parking is another challenge. For most PwDs, conventional parking lots are not adequate to alight and board safely. Unfortunately many tourism businesses have very limited or no accessible parking, especially in national parks.

Communication barriers

Communication has been a major barrier among PwDs (Snyman, 2000). In the majority of cases, basic information is not usually available in braille, e.g., evacuation procedures in case of emergency. Restaurant menus are also usually only available in text format. Furthermore receptionists and tour guides are not able to use sign language and other means of commination other than text or spoken.

Operators are uncomfortable with tourists with disabilities

Death and disability are the issues/subjects most people are most uncomfortable discussing. Perhaps this is because of the traditional model of disability which presents myths associated with disabilities (Chitima, 2013). This makes tour operators and travel agencies very uncomfortable when dealing with PwDs. The majority of travel operators think that dealing with PwDs creates problems and therefore avoid doing so (Cavinato & Cuckovich, 1992:23).

The above point testifies that PwDs are disabled by society rather than by their personal tragedy. This concurs with the social model of disability on which this study is anchored. A framework for universal accessibility will go a long way in addressing these challenges especially in the context of national parks.

3.12 ACCESSIBILITY OF NATIONAL PARKS IN SOUTH AFRICA

Patton's 2013 status report on universal accessibility in South African National Parks, notes that SANParks is committed to making its tourism facilities universally accessible. The move towards universal accessibility is gaining momentum at different levels in individual parks. The organization has adopted internal protocol on universal access to help management and staff to provide facilities and experiences suitable for guests with disabilities. The document discusses accessibility under the following subsections: physical access, accommodation, hides, nature trails and broadwalks. For sensory impaired guests, staff training, audio description, sound booths and tactile exhibits are among the important points. These are discussed in turn.

Physical access

With a few exceptions, physical access to national parks in South Africa is not a major challenge especially at the entrance gate and rest camps. The majority of the parks have accessible parking berths, ramped access into the reception and accessible public ablutions (Patton, 2013). However, this falls short of the requirements of universal accessibility which advocates for universal design (Mace *et al*., 1991:3). According to universal accessibility principles, the facilities should be easily accessible by not only the physically challenged, but those with other forms of disabilities without the need for the guest to modify or put in extra effort. Ramps are for people with mobility impairments, not those with cognitive and sensory disabilities.

Accommodation

A hundred and twenty one of SANParks' 2 074 accommodation units were accessible by 2013. This represents about 5.8% of total accommodation available. SANParks acknowledges most of these units are designed for mobility impaired guests. The word 'adapted' itself connotes a lack of understanding of universal accessibility. Mace *et al.* (1991) note that, adaptable design has to do with designing a facility in such a way that it is suitable for PwDs and can be used by people without disabilities at other times. Again, this is not the same as universal design. Accessible facilities at SANParks include ramped access, accessible ablutions, roll-in showers, grab bars and rails and lever taps. There are 21 accessible campsite ablutions for mobility impaired guests throughout SANParks national parks.

Hides

According to Patton (2013), any new hides are built to universal design principles. They have ramps and clearance below the viewing slot to accommodate legs and wheelchair foot plates. The hides also have movable benches or spaces between benches to accommodate wheelchair users. Unfortunately, the old ramps remain relatively inaccessible since they are elevated to maximize the view. However, all new hides, whether elevated or not, have ramped access. Accessible hides are found in Addo Elephant, Kgalagadi Transfrontier Park, Kruger, Mapungubwe and, Mokala and West Coast National Parks.

Nature trails and broad walks

Patton (2013) reports, that, several parks have accessible trails despite the challenging terrain in South Africa's national parks. These include Addo Elephant, Agulhas, Augrabies Falls, Garden Route, Karoo, Kruger, Mapungubwe, Table Mountain and West Coast National Parks. It is important to note that the accessibility of these trails is meant for people with mobility impairments.

Apart of those with physical disabilities, tourists with sensory disabilities need to be considered when considering the accessibility of national parks. People with sensory disabilities are normally not as much affected by the physical set up as those with mobility impairments. Their major hurdle has to do with intangible aspects. These are outlined below:

Staff training and sensitisation

As discussed earlier, the attitudes and behaviour of staff members affect the experiences of PwDs when they visit tourist areas (Snyman, 2002). The ability and willingness of staff to interact and assist such guests is critical to their experience. In South Africa, sensitisation training has not yet been rolled out in SANParks as an organisation; however, a few individual parks have infrequently done some kind of training. In very few cases, some staff members have learnt to use sign language and other languages (Patton, 2003).

Audio description

This involves verbally availing the visual world to those with visual impairments. This is done via recorded soundtracks and is meant to enhance the experiences of the blind by completing their mental image of what is going on in the park. To date, there is no operational audio description in South African national parks. A pilot project is underway at Kruger National Park in conjunction with the pioneers of the Audio Description in South Africa. This improves the independence of blind people in parks.

Sound booths

Sound booths are the best way of ensuring that children, the visually impaired and the intellectually challenged identify and appreciate the sounds produced by living organisms in the park. All visitors have to do is to press a button and the sounds of various animals in the park are played. According to Patton (2013), Addo National Park and a few other national parks have these sound booths.

Tactile exhibits

These are tangible artificial or natural outcrops that give blind visitors a deeper experience of the park by touching and feeling. The whole story of the national park can be told via these tactile methods. A good example is the Rhino Museum at Berg-en-Dal Rest Camp in Kruger National Park (Patton, 2013). This is a typical example of a created or artificial tactile environment where one can feel the Rhino size model, Rhino spoor and rubbing posts.

Scent experiences

Scent experiences are good for the visually impaired. This involves picking up the scent of the natural environment, particularly plants with a rich fragrance or animals that secrete strong odors. At Kruger National Park, a nursery offers great scents. Visitors can also follow an accessible broadway that takes them all the way through the nursery.

Listening points

These are spots within the park where visitors can listen to the sounds of what is going on in the park. Normally, a bench is provided so visitors can comfortably sit and listen to the sounds of nature. The best sounds are obtained in the early morning when birds sing and in the late afternoon when mammals gather for a drink. Listening points exist in several parks in South Africa (Patton, 2013). However there are a number of shortfalls and challenges facing SANParks in its endeavour to achieve universal accessibility.

Shortfalls

- First and foremost, physical access has been given more priority than sensory and cognitive disabilities. The few instances where sensory and cognitive impairments are mentioned are by accident rather than design. There is need to invest in enabling technology for sensory impaired guests in all areas of the park.
- Game drive vehicles are still very inaccessible to PwDs. According to Patton (2013:5), there is need for embarking and disembarking platforms.
- Not all types of accommodation have an accessible option and this creates problems when large groups of PwDs visit the park.

Challenges

According to the 2013 Status Report on universal accessibility, the following challenges have been noted:

- Contactors that build accessible facilities sometimes lack knowledge of universal accessibility standards thereby placing some features inappropriately.
- At times accessibility may require an unacceptable alteration to the natural environment, which may be against world heritage status considerations. The costs may also be prohibitive.
- Staff is not familiar and experienced in dealing with PwDs and this affects the way they behave when PwDs visit the parks.

3.13 ACCESSIBILITY OF NATIONAL PARKS IN ZIMBABWE

There is no literature on the accessibility of national parks in Zimbabwe. This is perhaps because there is either ignorance of the existence of the disability market or lack of interest among park management and researchers in this area. This study will therefore fill this gap by exposing and documenting accessibility levels in Zimbabwe's national parks.

3.14 BEST PRACTICES IN ACCESSIBLE TOURISM

According to Buhalis, Darcy and Ambrose (2012:1), many are beginning to realise that accessibility is more than just providing access to PwDs. They argue that accessibility entails providing access to all, including people with temporary disabilities, young children, pregnant women and the aged. Their argument is based on the principles of universal design. Despite the fact that universal accessibility has been recognised as an important concept, there is no universally acceptable standard for accessibility, especially in natural areas and national parks in particular (Parks & Benefits, 2007). The best practices discussed in this section are organisation specific, country specific or region specific. It is therefore important to note that while these 'best practices' are a good guideline, their application is limited to the situation and circumstances for which they were designed.

As already noted, some of the best practices were not designed for natural areas but assist when one contemplates developing a universal accessibility framework. One such standard is the Scandic Accessibility Standard.

3.14.1 The Scandic Accessibility Standard

While this standard was designed specifically for the Scandic hotel group, it may go a long way in the development of a universal accessibility framework for national parks. This is simply because most national parks, particularly in South Africa and Zimbabwe, provide lodging facilities. By modifying some of the factors, the standard can be applied to national parks. The researcher also selected a number of questions for the survey from this standard.

About the hotel and accessibility

The Scandic group of hotels is a well-known hospitality group with hotel operations in countries like Sweden, Norway, Denmark, Finland and Germany (among other countries) (Scandic Hotels, 2013). Scandic hotels comply with the legislation of the countries in which they operate. If the accessibility standards of the country are stricter, the hotel group goes by the country standards. Where the hotel standards are higher, they take precedence. The group's motto is

‘Everyone is welcome at Scandic’ emphasizing the fact that all guests are treated alike. The group also believes that design for all is good for everyone. This is exactly what the researcher foresees for national parks in Zimbabwe and South Africa.

The hotel chain boasts of being the first hotel chain in the world to describe the accessibility of each individual hotel on its website. Furthermore, Scandic is the only hotel group to employ a full time accessibility ambassador, whose specific duty is to ensure universal accessibility. Since 2003, when the hotel group embraced accessibility, it has won a number of awards and accolades. In 2013, it won the Bevica Foundation’s Accessibility Prize, an award given to companies that have shown particular interest in PwDs (Scandic Hotels, 2013:1).

The Standard

Designed with the aim of ensuring equal access to all, the 110 points of the Scandic accessibility standard covers the whole hotel from the car park to the bedroom and public areas (Scandic Hotels, 2013). It was developed after consulting with a few guests with physical disabilities and able-bodied management personnel. The accessibility ambassador’s first task was to hire three wheelchairs for the headquarters. Each employee at headquarters was given the opportunity to sit in a wheelchair for two hours in order to understand how people who use wheelchairs move around. These employees’ input and that of a few guests with disabilities was used to develop the accessibility standard. One criticism of the methodology is the fact that people without disabilities will never represent those with disabilities, even if they are placed in a wheelchair. Furthermore, they were in the wheelchair for only two hours and this is not enough time to really understand the accessibility expectations of PwDs. Moreover, the employees were exposed to only one type of disability (wheelchair use). At the end of the day, their views are therefore skewed towards a single disability dimension.

Of the 110 points, 81 are compulsory; in other words, all Scandic hotels (new or old) are expected to have these in place at any given time. The remainder is supposed to be installed in renovated hotels.

The 110 points of the standards are divided into 22 categories or functional areas that constitute the hotel.

Parking and entrance

According to the standards, the parking space should comprise of at least two spaces of at least 3 meters wide each. This parking area must be clearly marked with a wheelchair symbol. While this is very good for people with disabilities, one may want to ask 'why a wheelchair symbol?' The symbol gives the impression that accessibility is equal to providing people with mobility impairments access to tourism facilities (Scandic Hotels, 2014). This does not recognise other disability embodiments. People with visual impairments and those that cannot hear properly seem to be excluded. Perhaps the main problem lies with organisations and bodies that come up with such symbols; their background may be restricted to contact with persons who use wheelchairs.

The path between the parking space and the entrance must be illuminated and delineated with access ramps at change of level. The distance of the path should not exceed 25 meters. At the entrance, the door is expected to have a minimum width of 800 mm clear and a very low if any threshold is expected at the door. The door must be openable using an automatic push plate which is 1 000mm in height.

If the accessible entrance is not at the main entrance, the Scandic standard recommends that there be clearly marked directions to the access point. This is however highly discouraged by the principles of universal design which discourages exclusion based on ability or the lack thereof (Mace *et al*., 1991).

Reception desk

It is also important at Scandic to ensure that a rug in a contrasting colour lead from the entrance to the reception. This is very helpful for people for visual impairments. According to Scandic standards, at least two cane holders must be attached to the reception desk for people with visual impairments to place their canes while checking in or having discussions with the receptionist. Cane holders' seats must be made available close to the reception desk to allow guests to sit while checking in. Since some guests may be deaf, hearing loops must be provided and these should be marked with the appropriate symbols. The Scandic standard also ensures that vibrating wake up and fire alarms are provided for people with hearing impairments (Scandic Hotels, 2013).

One big problem that many have faced has to do with height of the reception desk. In most cases, people using wheelchairs and those who are very short have serious problems accessing reception. At all Scandic hotels, one part of the counter should be an appropriate height for guest in wheelchairs. While this is a very good strategy to accommodate guests with disabilities, it falls short of the requirements of universal accessibility where all should have access to the desk without specialized design or adjustment. The whole desk, not just one part, should be of a height that is comfortable with all embodiments (Center for Universal Design (CUD), 2003).

Lobby

Enough space should be available in the lobby to allow wheelchairs to move freely. Sockets must be available to charge electric wheelchairs at a height of 1 200mm. If there are shops in the lobby, passages (aisles) of at least 800mm wide should be provided and the goods should be reachable from a wheelchair. Walkways from the reception to lifts and other public areas should be clear to allow for easy movement. A seat close to the main entrance should be provided for those waiting for a taxi (Scandic Hotels, 2014).

Easy access point and elevators

It is mandatory at Scandic to have at least one workstation that is easily accessible to a person using wheelchair. Another workstation should be available for those who prefer to stand. The standing up work station must be included when renovating or constructing new buildings.

The Scandic standard further strongly encourages that all elevators be accessible; if not, clear directional signage should direct people to accessible elevators. The elevators must either have automatic doors or a door opener. Inside the elevators, the buttons (control panel) must be placed at a height that can be accessed by a person in a wheelchair. This is perhaps another weakness of the standard. Emphasis is placed on wheelchair access, not on all disabilities. In terms of the principles of universal design, the control button should be accessible to all (Mace, 1991; Rains 2004:2). Of critical importance is the fact that the standard recognizes people with visual impairments in elevators. In each lift, the control panel button must also be marked in braille and a voice announcement indicating the floor and direction should be installed. The standard stipulates a minimum of one elevator whose door is at least 800mm clear.

Stairs

If stairs are available, the first and last steps must be marked with contrasting colours. If the stairs are wider than 1 050mm, there should be handrails on both sides. The rails must protrude 300mm at the start and end of the stairs. Again the Scandic standard fails because universal accessibility strongly discourages the use of stairs. While stairs are helpful to people with disabilities other than mobility, they exclude the mobility impaired and at times those with mental and visual impairments (Scandic Hotels, 2013).

Corridors/Paths

According to the Scandic standard, all corridors must be at least 300mm clear width while other indoor walkways should maintain a minimum width of 800mm clear between the wall and pillars. This allows wheelchairs to be maneuvered without difficulty. This also focuses on wheelchair access at the expense of other disabilities (Scandic Hotel, 2013).

Meeting room/Auditorium

The standard expects all doors to meeting rooms to have a minimum width of 800mm to allow for wheelchair users. Coat hangers and telephones must be reachable from a wheelchair (1 200mm). People with allergies are also catered for, as at least one meeting room should have hard flooring. Many people are allergic to carpets. Seats must also be available just outside the meeting room.

Hearing loops should be available to borrow for conferences and a proper sign showing that there is a hearing loop should be available. In the auditorium the stage is expected to be wheelchair accessible and a wheelchair accessible podium should be made available when needed. This is an adaptable design which again falls short of universal accessibility requirements. With universal accessibility, the podium should be designed in such a way that anyone, whether disabled or not, should be able to use it without the need for adaptation or specialized design. The main auditorium should be easily accessed by people using wheelchairs and thresholds should be avoided. This section of the standard focuses on making the meeting room more accessible to wheelchair users than any other type of disability.

Food and Beverages outlets

Most PwDs have difficulties accessing food at buffets. This is because most buffets are too high for wheelchair users, children and other people. The Scandic standard recommends a buffet height of between 850mm and 900mm. This makes cups, plates and glasses accessible to PwDs. A critical point is point 51 – Breakfast that provides special bread for people with gluten or lactose intolerance. This is a rare facility in most hotels. Such service is usually only provided on request.

Guest bathrooms and toilets

The standard requires that there be clear signs showing the direction of accessible toilets. However, it is not clear on the kind of signage and whether all dimensions of disabilities are considered. The door should have a minimum clear width of 800mm and an inside handle under which there should be a handrail. There should not be a threshold on the door to allow access to wheelchair users.

According to the Scandic safety and security manual, an alarm should also be installed in the bathroom in case of emergency. The toilet must also have foldable armrests and toilet paper must be on the armrest. Wash basins should have enough space to accommodate a wheelchair user. The height of the basin must not exceed 780mm and there should be a single lever basin mixer. There should be two soap dispensers in the bathroom, one standard model 'squeeze' and another 'special disable range', both reachable from a wheelchair (Scandic Hotel, 2013). Once again, this does not auger well for universal accessibility and universal design principles which call for one facility that is usable by all. There should be just one user friendly soap dispenser, preferably automatic. A 'special disable range' is discriminatory (Rains, 2004).

The Scandic standard requires towels, hooks, vanity mirrors and hair dryers to all be reachable from a wheelchair. One wonders whether people with visual, hearing and cognitive impairments are considered.

Directional signs

Scandic hotels have clearly marked directional signs in contrasting colours to ensure access to people with visual impairments. These signs must be placed at a height reachable by all (1 400-1 600mm).

Accessible guest rooms

Normally, guests spent as much of their time in their bedroom as anywhere else in a hotel. To ensure that all guests experience a comfortable stay, the Scandic standard requires the following:

- A telephone handset and a TV remote control on a side table.
- The bed height is adjustable for back and legs and does not exceed 550mm including the mattress. Space on the floor around the bed should be at least 800mm. This allows persons with different disabilities to move from the bed without bumping into anything e.g., wall, pillow, wardrobe, etc.
- The wardrobes in Scandic rooms either have no doors or the doors have a sliding mechanism. The wardrobe rails and hangers are within reach of people with challenged height (1 200mm).
- The table and the chair in the room should be easily accessed and used by people with disabilities.
- The electrical sockets at the table should also be reachable from a wheelchair.
- Two peepholes; one on the lower side and the other standard. This allows all to use peepholes regardless of their height, age and disability.

Shower area

The shower area should be wheelchair accessible. There should be a shower chair for those who cannot stand and it should have a back and arms (this applies to the purchase of a new chair). A thermostatic mixture should be installed in all showers to reduce the complications

involved in manual mixing when one has a disability. A shower crème/ shampoo dispenser standard model ‘squeeze’ should be available and reachable from a wheelchair. Furthermore, the shower handle should be laced at its lowest to allow for users with height restrictions. Finally a shower glass wall should be built in all hotels (Scandic Hotel, 2013).

Once again, it is important to underline the fact that while this standard is a good benchmark it falls short of the requirements for a universal accessibility framework for national parks. This is due to the following reasons:

- The standard was designed for the hotel sector and particularly for the Scandic group of hotels. This means that some circumstances that are unique to park accommodation may not be fully addressed.
- The methodology used to formulate this standard leaves much to be desired. Broader consultation with PwDs is required if one is to come up with a universal accessibility framework for national parks.
- The Scandic hotel group does not operate in Africa and situations differ from region to region and continent to continent.
- The main focus is people with physical disabilities, particularly those who use wheelchairs. A more cross cutting study is likely to produce more universally acceptable standards.

A lodging perspective is not sufficient in studying universal accessibility in national parks. A more relevant example (such as the Parks & Benefits guide in 3.14.2) may help. This does not discredit the Scandic accessibility standard since the accommodation element of the national parks is covered. The following case study is closer to home.

3.14.2 Master guide on accessibility of protected areas for all

Another attempt to come up with accessibility standards for national parks was done by the Parks and Benefits Baltic protected areas and tourism. The section below provides the details of this accessibility guide and its major pitfalls.

Background

This guide was developed for the Baltic Sea region between 2007 and 2013 with the aim of promoting 'accessibility for all' in protected areas and tourism. In accordance with the principles of universal design, the project sought to provide accessibility solutions not only to specific groups of handicapped people but to all (Parks & Benefits, 2007). It is important to note that this guide was developed specifically for the Baltic Sea Region, whose tourism resources are different from those in South Africa and Zimbabwe. Furthermore, the guide was developed for protected areas in general, not national parks. This means that its application is limited especially when it comes to national parks in Southern Africa.

Methodology

Unlike the Scandic standard that received input from a few guests with physical disabilities and staff members, Parks and Benefits used the criteria adopted by the Accessibility Label in Denmark. This label has been granted to 304 restaurants, 184 conference, exhibition and meeting venues and 211 museums in Denmark (Parks & Benefits, 2007:1). These accessibility guidelines were adopted and applied to improve Parks and Benefits' infrastructure, outdoor furniture, attractions and facilities.

This is strictly a supply side driven guideline which did not take into account the views and opinions of PwDs. Furthermore, the use of criteria for the design of places other than natural areas may reduce its applicability. The current study takes on board both input from PwDs as well park management's views on accessibility issues.

The accessibility master guide

Unlike in the built environment, many people and governments are very reluctant to invest in the accessibility of protected areas (Parks & Benefits, 2007). This explains the poor infrastructure for PwDs in most natural areas. As a result, there are no internationally acceptable accessibility standards for national parks.

Parks and Benefits selected three criteria for infrastructure solutions and best practices in accessing natural areas (i) how to get to the protected area (ii) how to move through the park and (iii) how to make attractions and activities accessible.

How to get to the park and around the park

One can get to a park either by public transport or with a personal vehicle. The questions are: Is there appropriate and adequate parking? Is there is clear access to the park entrance / reception from the car park /station? What about signage? According to this guideline, ideally, public transport should be available to get people to the park. However, this is not very realistic due to a number of reasons, one being that most national parks offer self-drive tours. In this case, the most ideal means of getting to the park is by personal vehicle. There is therefore a need for adequate and appropriate parking. Three percent of parking lots should be reserved for people with disabilities. A standard parking lot should measure 3.5m width X 5m length and 7.5m for vans. The surface must also be firm and paved.

There should be proper signage from the car park to the park entrance or reception. The pathway should be barrier free and must have ramps to cater for people using wheelchairs and those with mobility problems. A tactile vertical edge of 2.5 to 3 cm should also be in place. Proper signage should also be put on boards outside the walking areas. These signs should be easily understood, easy to find, illuminated and tactile. The entrance to the park should be marked with an attention field which has different paving (0.9X0.9m). Lighting should mark the entrance.

Provision should be made for the visually impaired to use their guide dogs. However, this is only possible if the park is not home to animals. In South Africa and Zimbabwe, the majority, if not all, of the national parks are habitats for animals. This demonstrates that this guideline that focuses on the Baltic Seas region may not be easily applied in Southern Africa where wildlife is a key tourist draw card.

In case one uses a bus, there should be a clear path from the bus stop to the park entrance. There should be a tactile edge on each side of the access path to assist people with visual impairments. The bus station should have enough space for at least two people using mobility aids to pass each other. Furthermore, an access ramp should be available for alighting or boarding the bus.

Seats should also be made available for passengers with disabilities as they wait for the bus. On the bus itself, enough spaces or seats must be allocated for PwDs and restraining systems must be available for safety during the ride. The boarding system should allow independent access through the use of low floors, hoists, gangways, ramps and aerobridges among others. While Parks and Benefits advocates for these facilities on conveyances, it is important to note

that in Southern Africa, particularly in Zimbabwe and South Africa, park authorities do not own buses to ferry passengers to and from the parks. A separate set of recommendations should be made to transport and tour operators.

Access to water and boats

Since the accessibility guide was designed for the Baltic Sea Region, water based activities are a major element of tourists' experiences. Accordingly, Parks and Benefits propose access to the water or beach via a clear path with a ramp. There should also be a means of getting PwDs into the water, for example, a bathing jetty with a lift. Benches should be made available at the beach as well as an accessible toilet and change rooms that are accessible to wheelchair users. A canoe lift or hoist ramp must be available to get people using wheelchairs into canoes or boats. Fishing platforms must be accessible to such people. There must be an accessible path to the platform and proper railings (with wheel guides). On the platform a 1.5 x1.5 m turning area must be availed to wheelchair users and benches with a seat height of not more than 45cm should be provided to cater for people with week hands and arms. There should be a helper or support for fishing rods. A closer look at the water access facilities proposed for the beach reveals that they are mainly for people with mobility challenges. People with visual disabilities have not been considered.

Trails

In order to avoid using undesignated routes, most national parks have trails. These are designated paths or walkways along which visitors should walk.

Trails for wheelchair users

These should be free of any form of barriers (furniture, signs etc.). They must have guiding lines like railings; the foot path should be free from barriers to cater for people with visual impairments. Accessible toilets should be made available along the trail.

The specifications for trail design are as follows;

- Width - main trails should be at least 1.5 or more and by-ways at least 0.9m
- Height - upward movement space should be 2.3m

- Surface - must be low-vibration and navigable by wheelchairs. They should be solid non-slip, joint less, even and step less
- If there are problems with flooding, the trail will be lifted a little.
- The trail should be of sufficient width to accommodate two wheelchairs. Watch out for danger spots and put fall protection at ground level with side gradients; the mapping height should be 1km.

Trails can be made of water bond, wooden planks, metal, grid or stone. All need special professional builders who have a good knowledge of drainage.

Trails suitable for people with physical handicaps

When it comes to people with physical handicaps there must be resting areas with tables and benches along the trail. The resting places should be clearly marked with an attention field of 0.9x0.9. If there are steps along the trail, contrasting colour markings should be on the first and last steps. Hand rails should also be put on both sides of the stairs and ramps. The hand rails are expected to have a clear width of about 4cm and a thickness of 3 t-5 cm to allow for good grip.

The Parks and Benefits master guide proposes that service buildings/kiosks and accessible toilets be availed along the path. While these requirements are essential for PwDs, one should bear in mind the fact that national parks in South Africa and Zimbabwe are meant mainly for conservation of wildlife and should not be strewn with buildings.

The trail for people with physical handicaps should have round wooden beams and tactile rails as a guide for visitors who use white sticks; the diameter of the tactile should be 10cm. If the trail is made of wooden planks, a tactile side angle 10cm in height should be installed. The tactile must be in contrasting colours for people with visual impairments. Again, in order to assist the blind and visually impaired, it important to ensure that there are ground indicators that point people to rest areas, crossings, and information boards (see picture). These trails specifications show that each type of physical disability has a specialized trail. This is inconsistent with the principles of universal design which call for facilities that are usable by all (Rains, 2004; Mace, 1991).

Bridges

The master guide on accessibility recommends that bridges be accessible for visitors with mobility aids. In other words, there should be no steps, stairs and hazards and there should be fall protection. At the end of each bridge, colour contrast markings should be made to command attention. Handrails must also be placed on both sides of the bridge and these should be of sufficient thickness for good grip (3-5cm). The material used to build the bridge must be smooth, even and non-slip. Like on the trails, a tactile rail for white stick users (10cm in diameter) should be installed.

Guiding systems

Here the focus is to make information available to all people regardless of their disabilities. For example, information about the park should also be available in braille. Audio information for people with visual impairments and text information for those with hearing impairments should be made available. The master guide makes provision for people to make use of personal assistants and guide dogs.

For proper guiding, signage and maps should either be illuminated or tactile or both. Common symbols or icons should be used on all signs and directions to communicate the same message to all. Furthermore, visitors need to be oriented on arrival so that they know what to expect in the park.

Information boards

The major concern is whether or not information reaches everyone. All information should also be in braille and should be in short text that is easy to understand. Tactile pictures should be available for visitors with visual impairments. The information boards must all have a reading height accessible from a wheelchair (approximately 1.3m). In the case of roofed information stands, the Parks and Benefits guidelines specify the stand height (2.3m) but the information board should still be reachable (at 1.3m).

Resting places

The Parks and Benefits guidelines require that there be smooth access to resting places and that they have benches and tables. To cater for different dimensions of disabilities, the seats must have both back rests and armrests. The seating height of the seats should not exceed 42cm and the tables should accommodate wheelchairs. In other words, there should be at least 50cm free space under the table. These tables and benches should be on firm and even surfaces. Besides the bench, guests with wheelchairs or baby buggies require free space of at least 1.5x1.5m.

The guide suggests that resting places be availed every 100m along trails in the park. This may be very good for recreational parks and botanical gardens where there are very few or no animals. The animals are also harmless. For national parks, especially in the African context, such regular resting places may not be applicable due to the wildlife that characterises most of these national parks.

Parks and Benefits guidelines also describe playgrounds in the parks. This is further evidence that these guidelines were not designed for national parks. The playgrounds must be fenced or hedged. This may not be easily applicable to national parks in South Africa and Zimbabwe since noise associated with playgrounds is prohibited in the majority of national parks.

Making attractions and activities accessible

View points

The master guide prescribes that trails should be available that lead to viewing points. All the trail specifications as described earlier must be followed. If the trail is on sandy ground, a metal grid can be used and the minimum width of such trails should be 1.2 to 1.5m with tactile side limits and handrails.

With regard to bird-watching hides, or look out towers, there should be a smooth connection between the accessible path and the hide. According to Parks and Benefits, the hide is expected to have railings or wheel guides and a 1.5x1.5m turning area for wheelchairs. All watching hides must have benches whose seating height should not exceed 45cm and the openings of the hide should be at a height of between 70cm and 1.4m. People view birds

through these openings. The inside of the hide should be at least 4m x 2.5m to allow enough space for visitors and the furniture inside should be movable.

Access on horseback

While horseback can be used to access recreational and other parks without predators, these may not be ideal for national parks in Zimbabwe, especially for visitors with disabilities. The Parks and Benefits master guide recommends that a mounting block be constructed, large enough to accommodate three persons, the visitor, two assistants and a wheelchair. The platform must also be strong enough to sustain the given weight and should be accessible through a ramp, ladder or stairway. Again, the idea of ladders and stairways does not support universal accessibility.

Strong handrails with good grip are also to be installed; these will assist PwDs to mount a horse. It is important to mark the edges of the mounting platforms with contrasting colours in order to assist visitors with visual impairments.

Toilets

The park must have an accessible toilet within reach of the outdoor area. The interior and exterior specifications for the toilet should conform to the principles of universal design. These include:

- Smooth access without steps and stairs
- Clear width of 0.77m when the door is opened at a 90 degree angle
- Turning area of 1.5x1.5m
- Clear area with a width of at least 0.8m on one side of the water closet
- Height of WC pan 0.48 to 0.5m above floor level
- Accessible washbasin with a clear space underneath for wheelchairs
- Grab bar in the inside part of the door together with an inside door handle

- Grab bars on the toilet seat and wash basin

Despite the criticism levelled against the Parks and Benefits master guide, it remains the basis for the development of a more comprehensive framework. This study used some of the points in this framework together with those of the Scandic standard to construct a questionnaire for the survey. The modified questionnaire was then interrogated by PwDs in order to determine the factors that they consider important so as to formulate a universal accessibility framework.

3.15 CONCLUSION

This chapter sought to establish the importance of nature-based tourism and to provide an argument for making natural environments accessible to people of different embodiments and abilities. It has been established that nature-based tourism is the fastest growing tourism sector and that people with disabilities are as willing to travel for nature a are their able-bodied counterparts. Further, it was revealed that the disability market for nature based tourism is growing hence there is need to make national parks and other natural areas universally accessible. While different organisations have tried to make tourism facilities accessible to PwDs, the quest for accessibility in natural areas has not yet been achieved, let alone universal accessibility. Standards have been developed in a bid to ease the difficulties that face PwDs but most of these standards fall short of the requirements of universal accessibility. They either focus on a particular disability or have been designed for specific organisations and institutions. A more universal and comprehensive framework is the ultimate goal of this research study.

CHAPTER 4

RESEARCH METHOD

4.1 INTRODUCTION

This chapter explains the research methodology. It details the sampling method, questionnaire design and data collection procedure. The method adopted for this research study included a literature review and an empirical survey. The study is unique in three ways: (i) it investigated both the demand side and the supply side, i.e., PwDs themselves and park management; (ii) a mixed methodology was applied where both qualitative and quantitative methods were applied; and (iii) a cross dimensional approach was adopted as it did not focus on just one dimension of disability, but examined people with mobility, visual and hearing impairments. This chapter presents an overview of the research method.

4.2 LITERATURE REVIEW

The researcher interrogated the literature related to tourism, universal accessibility, national parks, nature-based tourism, universal design and people with disabilities. The literature review contextualised the study in relation to other studies in this field. Much of the literature was found in peer-reviewed refereed academic journals like Annals of Tourism Research, Journal of Tourism Management, International Journal of Tourism Research, to name but a few. Books such as *Accessible Tourism* and *Best practices in Accessible Tourism* edited by tourism gurus like Buhalis, Darcy, and Ambrose (published in 2011 and 2012, respectively), were consulted among many other books. The researcher also made use of research databases such as Ebscohost, Emerald Insight and Science Direct to access useful information.

Apart from the more academic sources, public media, both print and electronic was used to access information that was not readily available in academic journals or to cement it. Corporate documents were also consulted from both South African National Parks (SANParks) and Zimbabwe Parks and Wildlife Management Authority (ZimParks) and their respective governments. SANParks and ZimParks' websites were also reviewed to establish the state of

affairs in as far as accessibility issues are concerned. Other documents consulted included reviews and plans on accessibility, parliamentary debates on accessibility, policy documents and any other useful documents.

4.3 EMPIRICAL SURVEY

The empirical survey was important in achieving the research objectives. This consisted of one survey, two sets of interviews and two panel discussions. The research design, sampling methods and procedures as well as data collection procedure are described below.

4.4 RESEARCH DESIGN

This study was descriptive in nature in the sense that the researcher wanted gain greater understanding of the accessibility expectations of PwDs as well as the perceptions of park managers regarding the universal accessibility of national parks in South Africa and Zimbabwe. This concurs with Cooper and Schindler's (2002:147) understanding of descriptive design which seeks to define and understand the attributes or properties of people, events and/or problems. The study was two-pronged in that it looked at both the demand side (PwDs) and the supply side (parks authorities). On the demand side, the intention was to establish what PwDs really regard as accessible. This was in the face of most accessibility definitions being crafted from a technical point of view rather than from the user's perspective. Accessibility expectations were sought using a self-administered online questionnaire as well as panel discussions with representatives of disability organisations. Another panel discussion was conducted with parents of children with disabilities. On the supply side, the views of national parks authorities and regional parks managers were sought regarding universal accessibility. Data from the park managers was collected using interviews.

The use of mixed approaches to data collection, one being qualitative and the other quantitative puts this study in the pragmatic paradigm and is very useful for triangulation. Pragmatism is a research paradigm that recognises the importance of mixed methods in research methodology (Pansiri, 2005:7; Tashakkori & Teddlie, 1998; Teddlie & Tashakkori, 2003). Rorty (1991:27) explains that the beauty of the pragmatic paradigm is that it regards the function of research as

improving the condition of humankind. Pansiri (2005:6) concurs and argues that research should make people happier by enabling them to cope more successfully with their environment and with one another. This fits well with the aims and objectives of this study, which sought to ensure that the natural environment is accessible to people of all embodiments so that everyone can enjoy the gift of life.

4.5 METHOD OF RESEARCH

Generally, research either adopts a qualitative or a quantitative approach. Quantitative research usually deal with facts and figures and is more objective while qualitative studies try to make sense of opinions, perceptions and ideas. The latter is more subjective in nature (Teddie & Tashakkori, 2009; Walliman, 2011). This study adopted a mixed methods approach by using both qualitative and quantitative methods. The use of these two approaches enriched the quality of the data as interviews provided in-depth information while the questionnaire tested as many variables as possible. As a result, a more detailed and mutually representative universal accessibility framework was developed. The method of research is summarised in Figure 4.1.

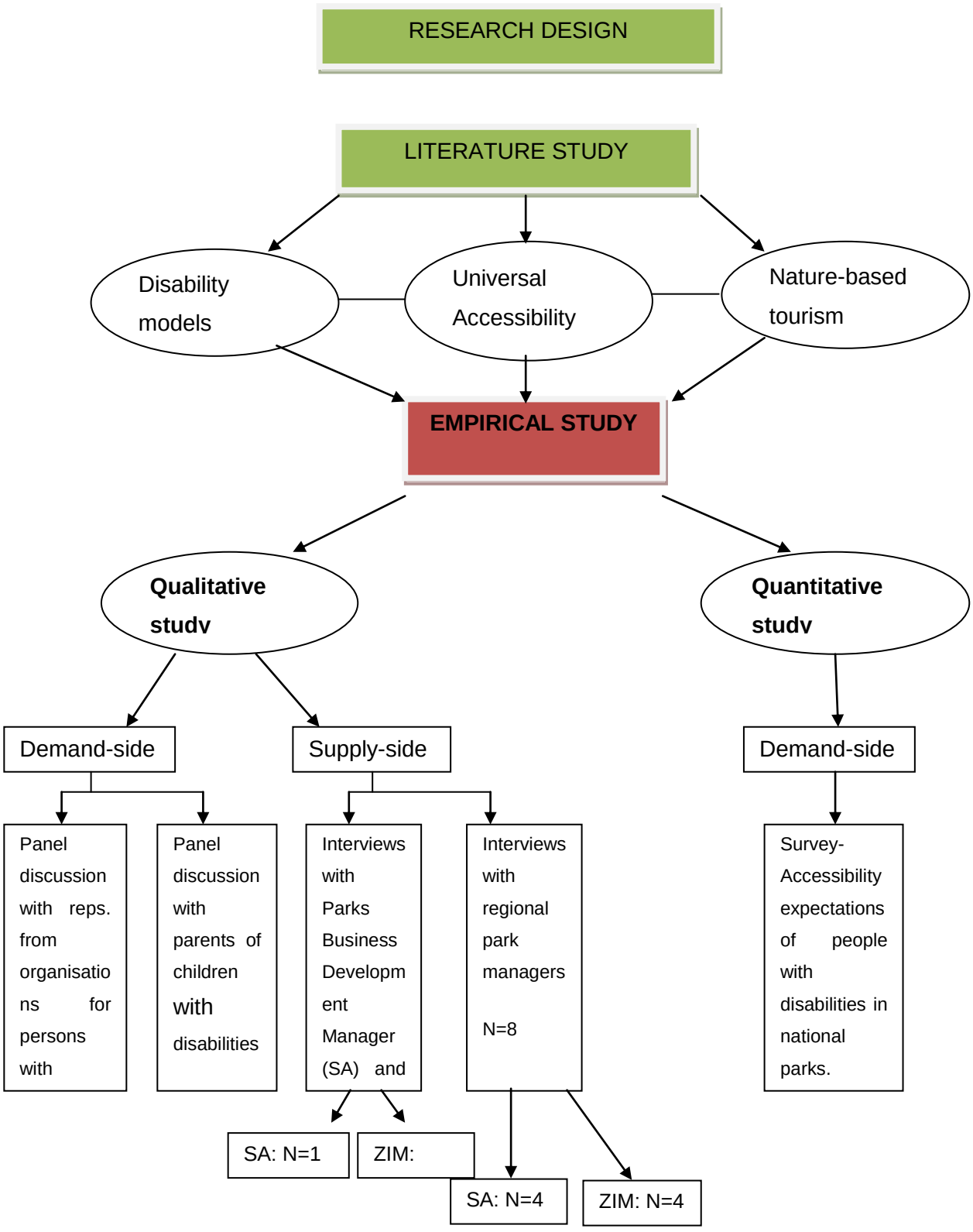
4.5.1 Quantitative research

In order to come up with an acceptable and beneficial accessibility framework, this study examined both the demand and supply sides of accessible tourism. On the demand side, it sought to establish the accessibility expectations of PwDs when (or if) they visit natural areas in general and national parks in particular. A quantitative survey was employed. As noted earlier, the idea was to ensure that people are involved when policy frameworks that affect them are developed. This is in line with the universal motto of disability organisations, “Nothing for us without us” (National Council for People with Physical Disabilities, 2014). This avoids a situation where disability needs are determined by people whose agenda has nothing to do with PwDs.

4.5.1.1 Sampling procedure

The researcher sent letters to organisations that assist PwDs in Zimbabwe (N=10), South Africa (N=12) and internationally (N=4). The letter requested that their members participate in the survey. The focus was organisations for people with mobility, hearing and visual disabilities since these are the most visible types of disabilities, and are easily identifiable. Of the 26 emails sent, only 12 organisations (Zimbabwe N=3, South Africa N=6, International N=3) responded positively and promised to email the online questionnaire to members of their organisation as well as post it on their websites.

Figure 4. 1: Research design



In order to complement the efforts of the identified disability organisations, the researcher searched for online forums where PwDs exchange ideas and experiences. Five international disability forums were found on Facebook: (i) Disabled People's Movement, (ii) Wheelchair Users Group (iii) ENAT Accessibility group (iv) "I thank God for my handicaps, for through them, I have found myself" and (v) Spinal Cord.

It was very difficult to establish the total number that would constitute a sample since the actual population was not known. Available statistics show that people with disabilities constitute about 10%-19% of the world population (Bull *et al*., 2003:14; Huh & Singh, 2007). This can be translated to about 600million to 859million people (APEC, 2003:5; United Nations, 2009; Vantton, 2002). The sample was then based on the guidelines set by Krejcie and Morgan (1970:608) and the work of Marpsata and Razafindratsimab (2010:4) and Shaghaghi et al. (2011).

Krejcie and Morgan (1970) recommended a sample size of 384 for a population of 1000 000 or more, while Marpsata and Razafindratsimab (2010) talked about the hard-to-reach population. According to Marpsata and Razafindratsimab (2010:4) and Shaghaghi *et al*. (2011), hard-to-reach populations include people who feel they are disconnected from the mainstream society and those living in disadvantaged social and economic situations. Marpsata and Razafindratsimab (2010:4) further argue that the hard-to-reach populations also include those who might not be very comfortable to open up their condition to the public and others whose cases are a little sensitive and emotional. Persons with disabilities, in one way or another, fit into any of these categories (Jones & Newburn, 2001:5; Chitima, 2013:16). These people may avoid participating in surveys because of the social pressure they feel from other members of the broader community (Duncan, White & Nicholson, 2005). For such, there is no given sample size (Crosby, 2010:14).

The study intended to reach the 384 mark but due to the fact that this population was hard-to-reach, 210 questionnaires were received by the end of the survey. This number is acceptable based on the fact that people with disabilities are a hard-to-reach population (Marpsata & Razafindratsimab, 2010:4; Chitura, 2012:16; Shaghaghi et al. (2011). Further, according to Gitonga, Ndirangu and Githeko (2013:17) and Kline (1994), for quantitative studies, the acceptable minimum sample size is 100 units, especially where factor analysis is to be used. Based on these authors, the 210 responses are acceptable.

4.5.1.2 Questionnaire development

Building on and adding to the Scandic Accessibility Standard for hotels and the Parks and Benefits (2007) initiative (see chapter 3), and a further literature review, a 10-page questionnaire was developed to solicit the views and perceptions of tourists with disabilities with regard to the accessibility of Zimbabwe and South Africa's national parks. The Sandic questionnaire was designed for hotel accessibility and is thus not fully applicable to parks. However since accommodation is a very important element of a visitor's experience in a national park, the standard provided important clues and guidelines to develop the questionnaire on parks' accessibility. Parks and Benefits sought to come up with a master guide for accessibility of the Baltic Sea region. Despite the fact that their guidelines were meant for a specific region whose parks have different features to those of Africa, this work made significant input in developing the questionnaire. The questionnaire had three sections. Section A examined the respondents' demographics, while Section B addressed the travel motivations of persons with disabilities and Section C ascertained the accessibility expectations of PwDs. In Section C, a Likert scale with values from 1 to 5 was used to determine the importance of an accessibility item of the national parks. Value 1 represented n*ot important at all* while 5 stood for *extremely important*. The respondents were expected to rate the 108 items in terms of their importance to them.

In order to be systematic and logical, the 108 items were categorised into 14 areas which cover the whole national park from the entrance to the guest bedrooms. Items 1 to 27 dealt mainly with transport to the national park, the parking, entrance to the reception and the reception area itself. Items 28 to 70 examined getting around the national park in terms of the trails, bridges, water based activities, bird watching and game viewing facilities, and guiding services as well as the independence of tourists around the park. Items 71 to 108 covered restrooms, bedrooms, dining areas, bathrooms and camping sites. All aspects of the national parks were covered as much as possible.

4.5.1.3 Data collection procedure

The questionnaire described above was put in electronic form using Adobe forms software and was administered online. The questionnaire link was emailed to the disability organisations that

had agreed to assist and was also posted on the wall of the Facebook pages for disability groups. All the completed and submitted questionnaires were automatically captured on a database kept by a senior research assistant in the School of Tourism at the North-West University - Potchefstroom Campus. The researcher received weekly updates on the number of completed questionnaires received. In the first few weeks, the rate at which questionnaires were received was not impressive and the researcher started to follow each member of the disability groups on Facebook and sent the questionnaire link to their inboxes. Letters of reminder were also written to the organisations for PwDs. The follow ups resulted in a slight increase in the number of responses but the numbers were still very low. The researcher then approached SANParks who offered to put the questionnaire link on their corporate website. This raised the number of responses. For tourists with visual impairments, an MS Word format of the questionnaire was sent on request. The same was done for those in Zimbabwe who had no internet access; they completed a manual questionnaire. With more personal emails, Facebook interactions and SANParks efforts, a total of 210 questionnaires were completed (before data cleaning).

4.5.1.4 Data Analysis

The data that was captured using the Adobe forms online questionnaire was transferred to excel spread sheets and sent to the statistical consultation service of the North-West University where it was analysed using the Statistical Package for the Social Sciences (SPSS). The statistical analyses were done in four stages. The first was descriptive analysis where the demographic profiles of the respondents were discussed and frequencies of the responses to the accessibility expectations were noted.

The second stage was factor analysis. Four exploratory factor analyses were conducted after having run the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Three of the factor analyses were performed on the accessibility expectations of PwDs (Section C) while the fourth was done on travel motivations (Section B). All items with a factor loading lower than 0.4 were considered poorly correlated to the factors and were hence dropped, but all those with a value of at least 0.4 were considered significantly correlated (Steyn, 2000:1). For each factor analysis, a reliability test was done using Cronbach's Alpha (CA) and only factors that had a reliability index of at least .6 were considered since this has an effect on the results. With the factor

analysis, the most important factors were identified and these contributed to the development of a universal accessibility framework.

After the factor analysis, ANOVAs (Analysis of variances) were conducted. Here all factors that had a *p-value* of less than 0.05 were considered to be statistically significant while 0.05 was considered a border line *p-value* and statistically significant to some extent. Any value above that was considered not to be significant. Means of factors were also calculated and all means above 3.0 were considered to be important. The higher the mean the more important the factor was to the respondents. Closely related to means is the standard deviation. Any standard deviation of between 0.65 and 1.5 was considered reasonable in this study. Effect sizes were also calculated according to Cohen's d-values. Cohen (1992:1) argues that d=0.2 is small and should not be considered; d=0.5 is medium and acceptable especially when dealing with people; and d=0.8 is large and shows that the difference in perceptions is practically significant. Cohen's prescriptions were also used in analysing this data.

The fourth and final stage in the data analysis was the analysis of ordinal demographic variables using Spearman rank order correlation. The researcher sought to examine the effect of ordinal variables such as type of education, length of stay and age (among others) on the factors that were established by the factor analysis. Here r=0.1 was considered to be small, r=0.3 medium and 0.5 large; therefore effect sizes that ranged from just below 0.3 to 0.5 and above were considered significant.

4.5.2 Qualitative research

As described in figure 4.1, in the qualitative approach, two interview sets and two panel discussions were conducted. The interviews were on the supply side while the panel discussions were done on the demand side. The personal observations were also considered in this study.

Supply side - Interview set 1

Interview set 1 included interviews with national parks headquarters in both South Africa and Zimbabwe.

4.5.2.1 Interviews with National Parks Headquarters (South Africa and Zimbabwe)

The main aim of the interviews was to establish the opinions of national parks authorities at corporate level of the concept of universal accessibility and their preparedness to adopt this important concept. These views and opinions were sought from both South African National Parks (SANParks) and the Zimbabwe Parks and Wildlife Management Authority (ZimParks).

4.5.2.1.1 Sampling procedure

The targeted population for these interviews was top management at the two national parks authorities. At the headquarters, parks authorities in Zimbabwe referred the matter to the Business Development Manager (Non-consumptive tourism) while SANParks referred it to the Projects Manager (Tourism). In other words, the key informant technique was used to select persons who were knowledgeable about tourism and issues to do with accessibility. In both cases, these managers were quite generous with information. The Project Manager for SANParks happened to be a person with a disability and that made this study more meaningful to him and the organisation. He has been working hard to ensure that access to national parks is enhanced and this study came as ‘an answer to his prayers’. The Business Development Manager at ZimParks is responsible for the non-consumptive side of national parks activities which mainly deal with tourism marketing. This made him the right candidate for such a study.

4.5.2.1.2 Developing the interview questions

Interview questions were mainly informed by one of the objectives of the study which sought to establish the opinions of park management on the issue of universal accessibility. Since personnel at the parks headquarters represent the whole entity, their views would reflect the organisation's position on the subject under study. The interview questions sought to establish whether or not these national parks authorities had policies on universal accessibility and whether the policies are governed by legislation. Questions on whether or not the national parks authorities regarded investing in universal accessibility as worthwhile were also included, among many others.

4.5.2.1.3 Data collection

For SANParks, the interview with the Projects Manager (Tourism) was held on 25th February 2014 while for ZimParks, the interview with the Business Development Manager (Non-consumptive) was only conducted on 26th May 2014. It was very difficult to get data from ZimParks because the parks authority required one to pay a permit fee before conducting any research. Both interviews were telephonic and took an average of 20 minutes each. The interviews were recorded manually on a semi-structured questionnaire specially designed to capture the data from the interviews.

Interview set 2

The second set of interview involved interviews with regional park managers (or their representatives) at the selected national parks in both South Africa and Zimbabwe.

4.5.3 Interviews with Regional Park Managers

As part of the qualitative research, another set of interviews was arranged with park managers. These managers oversee affairs at the different national parks in the two countries. These interviews sought to establish the opinions of regional park managers regarding making national parks universally accessible. This was mainly done for triangulation purposes as well as to establish if policy is implemented on the ground. Consistencies or inconsistencies between strategic management decisions and tactical and operational management decisions were identified. In other words, the major question was: would the park managers echo the sentiments of the parks headquarters?

4.5.3.1 Sampling procedure

As noted earlier (Figure 4.1) eight national park managers were selected for the study, four in South Africa and four in Zimbabwe. In South Africa, managers from Marakele, Mountain Zebra, Addo Elephant and Kgalagadi were chosen. Kruger National Park was deliberately left out due to the fact that the majority of tourism research focus on it and all possible developments are centred there. This makes it more developed and less representative of other national parks in the country. Kruger National Park also consists of various rest camps that were developed in different ways; therefore other national parks better reflect the true picture of South African national parks. The following factors were considered in choosing these national parks;

(i) Their geographic location - the researcher chose national parks that were geographically spaced in order to be more representative of all national parks in South Africa.

(ii) Level of development - The chosen national parks are at different levels of development, with Addo National Park being relatively more developed than others in terms of accessibility.

(iii) Park size - the sample of national parks is representative since Kgalagadi and Addo are quite large in size while Marakele and Mountain Zebra National Parks are relatively small. The selected national parks are more or less similar to other national parks in the country and hence more representative.

On the Zimbabwean side, Hwange, Gonarezhou, Manapools and Victoria Falls National Parks were selected. The same selection criteria were used for national parks in Zimbabwe. National parks in Zimbabwe are categorized into regions, the Northern, Southern and Western. Gonarezhou National Park falls under the Southern region, while Manapools is in the Western region and Hwange and Victoria Falls are in the Northern region. The Victoria Falls National Park was included from a judgmental point of view as it is one of the most visited national parks due to its proximity to the magnificent waterfall. The assumption was that the park manager might have a different perspective of universal accessibility given that Victoria Falls is busier than any other region in terms of tourism activity.

4.5.3.2 Development of interview questions

Similar to the first interview set, the questions for this interview set were based on the second objective of this study '…to establish the opinions of park management on making national parks universally accessible'. However, this questionnaire was a little longer than the one for the national parks headquarters. Based on the literature review, some variables from the Scandic Accessibility Standard (see chapter 3) were used to come up with questions. Apart from policy issues, the park managers were asked whether specific accessibility features were available at their national parks. Like their counterparts at headquarters, they were asked whether it is worthwhile to make national parks universally accessible and what they were doing in that regard.

4.5.3.3 Data collection

Appointments were made with the respective regional park managers or their representatives and telephonic interviews were conducted. On average, each interview took about 15 to 20 minutes and all the details were recorded on an interview questionnaire. While it was relatively easy to phone managers in South Africa, most of the national parks in Zimbabwe are located in very remote areas and there are no land lines for the park manager. If there is one, the network is so poor that making a phone call is a waste of time. The researcher had to drive around the country and conduct face to face interviews with the park managers. Again all the interviews

were recorded on a special questionnaire. The researcher also took advantage of the trips to make personal observations of what was really on the ground.

4.5.4 Demand Side

As illustrated in Figure 4.1, the study also looked at the demand side. Here the views and opinions of PwDs and their representatives were sought. Two panel discussions were conducted, one with representatives of disability organisations and the other with parents of children with disabilities in Zimbabwe.

4.5.4.1 Panel Discussion 1- (Representatives of disability organisations)

Apart from the interviews with parks authorities and regional managers, the researcher conducted panel discussions with representatives of organisations that assist PwDs. This was only done in Zimbabwe after discovering that few PwDs were willing and able to complete the online questionnaire. This unwillingness was partly caused by previous researchers who promised gifts and funding to PwDs in Zimbabwe but failed to deliver. The PwDs noted their disappointment that people only love them when they want information, after which they desert them. Due to this serious problem, many PwDs in Zimbabwe were not willing to participate in any study. Of the few who were willing, very few had access to the internet to complete the survey. Others were not literate enough and could not read and understand the questions in the MS word document. For these reasons, the researcher decided to complement the responses by conducting panel discussions with representatives of organisations that support PwDs. These included the Disabled Women Support Network, Danhiko Project, Faith, Love and Hope Trust, National League for the Blind, Jairos Jiri Association and Leonard Cheshire Home. These organisations represent people with all forms of disability including the blind, the mobility impaired and the visually impaired, among many others.

4.5.4.1.1 Sampling procedure

In order to ensure that all disability dimensions, especially those considered in this research study (the blind, and mobility and hearing impaired) were covered, the researcher tried to find organisations that deal with these disability dimensions among others. The aforementioned disability organisations are not disability specific; they accommodate the blind, hearing impaired and physically impaired persons. Persons with visual impairments were represented fully when the researcher included the National League for the Blind. While the other disability organisations also deal with people with visual impairments, they have only a few people with visual impairments registered as members. Most blind people prefer to affiliate to the League for the Blind. Purposive and judgmental sampling was used to select people from the six organisations that would best represent the interest of others. In three organisations, the founders were willing to participate while in the other three, ordinary (willing) members were chosen to represent their organisations and other members.

4.5.4.1.2 Developing the panel discussion questions

The majority of the questions asked in the panel discussion were derived from the quantitative questionnaire for PwDs. The only difference is that in this case, the questions were open-ended in order to solicit opinions and views. Panellists were asked whether they had visited national parks, and if not, why not. They were also asked to recount any challenges they met or were likely to meet when they visit national parks. An interesting question was whether these panellists or the people they represent would visit national parks if access was enhanced.

4.5.4.1.3 Data collection

The panel discussion was held at Dzivarasekwa 3 Community Hall on Wednesday, 20th August 2014 at 12h00. This community hall houses the craftwork of people with disabilities in the Dzivaresekwa community. Ten questions were posed and panel members responded while the researcher jotted down all the relevant and important points. At the end of the session, members were asked to give any other comments relating to the subject under study. The discussion took about an hour.

4.5.4.2 Panel Discussion 2- (parents of children with disabilities)

While in Dzivarasekwa, the researcher learnt of Batsiranai Centre where parents of children with disabilities gather and do crafts in order to earn a living. One may ask what difference children with disabilities would make to the study. It is important to note that in Zimbabwe, the majority of visitors to national parks are school pupils and students. As such, children with disabilities may also have an interest in travelling to natural places.

4.5.4.2.1 Sampling procedure

The choice of this group of respondents was solely based on the fact that they were within the reach of the research (convenience sampling) and that the researcher knew of no other gathering of parents of children with disabilities of this nature. The gathering therefore gave the researcher the opportunity to meet many people with the same characteristics in one place. Thirteen parents (mothers) participated in the panel discussion.

4.5.4.2.2 Developing the panel discussion questions

Like the questions for panel discussion 1, the questions for this panel were derived from the quantitative survey of the accessibility expectations of PwDs in national parks (see Annexure 1). Generally the questions had to do with what these parents would expect to find in national parks given the fact that they are the ones who usually travel with their children and they are aware of the challenges of accessing certain places. The other questions were specific to the children's demographics.

4.5.4.2.3 Data collection

Talking on behalf of other people is usually difficult but the situation is different in the case of parents of children with disabilities. They really understand the pain and hardship in trying to access different places. The researcher would ask questions to the group and parents responded in turns. Not all parents respond to all questions but on specific questions, the researcher encouraged everyone to give feedback. This was particularly important in order to establish the number of children with certain types of disabilities as well as whether or not they attend school. The whole discussion took just over an hour and was captured by the researcher.

4.5.4.3 Personal observations

In order to further strengthen the findings from the interviews, the researcher made use of personal observations.

4.5.4.3.1 Sampling procedure

Non sampling was necessary for personal observations since only the researcher made the observations. The observations were made when the researcher visited Zimbabwean national parks for data collection.

4.5.4.3.2 Data collection procedure

The researcher made use of an observation guide (see annexures). Some of the check points were simply taken from the interviews with park managers in order to verify what they were saying. Other questions were taken from the demand side questionnaire. The researcher observed as he went around the national parks. In each park, he joined a game drive and visited bird watching hides or game viewing platforms (where applicable).

4.5.4.4 Data Analysis

The researcher used Microsoft Word to transcribe the interviews and panel discussions. The open coding technique was then used to analyse the transcriptions while Cresswell's six steps of analyzing and interpreting data were employed (Cresswell, 2009:185-189). *Step 1* entails organising and preparing the data while *Step 2* is reading through all the data. *Step 3* is the beginning of a detailed analysis with a coding process while *Step 4* involves the use of the coding process to generate a description of the setting or people as well as categories or themes for analysis. In *Step 5*, one advances how the description and themes will be presented in the qualitative narrative and *Step 6* involves making meaning out of the data, that is, data interpretation.

4.6 SUMMARY

This chapter introduced and explained the use of the mixed methods approach to research. This method helped the researcher to solicit opinions from both the supply side and demand side with the aim of developing a universal accessibility framework that will be mutually acceptable. The quantitative approach was useful for statistical and scientific analysis while the qualitative method offered depth in the form of the views and opinions of both the demand and supply sides.

CHAPTER 5

EMPIRICAL RESULTS

5.1 INTRODUCTION

This study sought to develop a universal accessibility framework for national parks in South Africa and Zimbabwe. This chapter presents the detailed results of the study. The study was conducted in five stages. The first stage was the interviews with parks management from the National Parks Headquarters of both countries. The second stage involved another set of interviews with park managers of eight selected national parks. Stages three and four were made up of panel discussions with representatives from organisations for PwDs and parents of children with disabilities in Zimbabwe respectively. While the interviews and panel discussions were being conducted, the quantitative survey was administered electronically (stage five) to PwDs. In other words, the five phases did not take place in chronological order. The study adopted a mixed methods approach using both qualitative and quantitative methods.

The quantitative data that was collected from all the surveys was analysed by the Department of Statistical Consultation Services of the North-West University - Potchefstroom Campus using the Statistical Package for the Social Sciences (SPSS). The data was interpreted using descriptive statistics, exploratory factor analysis, and ANOVAs. Qualitative data was analysed thematically using Cresswell's six steps. This chapter presents the data as follows: the quantitative data is presented first, followed by the qualitative data, from both from the demand and supply side. At the end of the chapter, the results of the qualitative and quantitative studies are merged to produce solid results that will inform the recommendations.

5.2 RESULTS OF THE QUANTITATIVE STUDY

As detailed in Chapter 4, the quantitative study made use of a 10-page electronically generated questionnaire. This section reports the results of that survey.

5.2.1 Demographic profile of respondents

The first section of the questionnaire sought to establish the profiles of the PwDs regardless of whether or not they had ever visited natural environments. Of importance here are gender, age, nationality, home language, education level and type of disability. Table 5.1 summarises the demographic profile.

Table 5. 1: Demographic characteristics of respondents

Demographic characteristic	Category	Frequency(N)	Percentage
Gender	Male	99	53%
	Female	88	47%
Nationality	South Africa	108	56.8%
	Zimbabwe	26	13.7%
	UK	17	9%
	USA	5	2.6%
	Australia	3	1.6%
	Other	31	16.3%
Home language	Afrikaans	36	18.90%
	English	65	34.20%
	Shona	18	9.50%
	Other	71	62.50%
Marital status	Single	68	36%
	Married	92	49%
	Divorced	15	8%
	Other	12	7%
Type of education	No formal education	5	3%
	Primary education	3	2%
	Secondary education	50	26%
	Tertiary education	131	69%
Employment status	Employed	110	59%
	Unemployed	33	18%
	Self-employed	27	14%
	Other	18	10%
Type of disability	Mobility	121	65%
	Hearing	20	11%
	Visual	31	17%
	Other	32	17%

A total of 190 out of 210 questionnaires were considered valid after data cleaning. Of the 190 respondents, the largest percentage was male (53%) while the remainder was female (47%).

This means that more men were available and willing to respond to the questionnaire than women. The average age of the respondents was 42 while the minimum age was 19 and the maximum age was 83 years. The largest number of respondents was South African (56.8%), followed by Zimbabwe (13.7%), and the UK (9%), USA (3%) and Australia (2%) in that order. People with disabilities from other countries such as Israel, Pakistan, India, Kenya and others also completed the survey. In terms of home language, English (34%) was the most dominant among respondents, followed by Afrikaans (18.9%), and Shona (9.50%). Other minority languages combined together contributed to the remainder (about 1%).

Close to half of the PwDs who responded to this survey were married (49%), with singles being the second biggest category (36%). Some respondents were divorced, cohabiting and widowed. Sixty-nine percent had a tertiary qualification. This is not surprising since the majority were most likely white South Africans (English and Afrikaans speaking) who can generally afford education to tertiary level. The second biggest category was those with secondary education (26%), followed by those with no formal education (3%). The last group was people who only went as far as primary education (2%). This suggests that the majority of people who responded to the questionnaire were fairly educated despite their disabilities.

Fifty-nine percent of the respondents were employed, while 18% unemployed and the remainder were self-employed. There is usually a positive correlation between education level and employment; this is confirmed by these results. Turning to type of employment, respondents were employed in all fields including teaching, consultancy work, engineering, and nursing, to name but a few.

The majority of the respondents had mobility impairments (N=121) followed by those with visual impairments (N=31), and hearing (N=20). While a significant number of respondents had disabilities other than mobility, visual or hearing, these are not the main focus of attention in this study. Reference will only be made to mobility, hearing and visual impairments.

5.2.2 Travel patterns

Travel patterns constituted the second section of the quantitative survey. The study sought to establish the nature of the trips that people with disabilities undertake, the duration of their stay, the places visited and the factors that determine the frequency and duration of visits. The

majority of the respondents (45%) had taken local trips, that is, trips within their country of residence. Regional trips (e.g. within southern Africa) stood at 36% while international trips contributed 18%. One can assume that the fewer international trips could be a result of fear of inaccessibility. People with disabilities may not be sure of the level of accessibility in the countries they intend to visit. The results also reveal that, of all tourist attractions, the majority of the respondents visited national parks (63%). This confirms Ray and Ryder's (2003:64) finding that tourists with disabilities have a high motivation to visit national parks among other natural areas. This was also confirmed by Jaquette, (2005). As noted in this study, Africa has the largest percentage (71%) of visitors with disabilities.

The results show that, on average, 50% of PwDs who travel to national parks spend a minimum of five nights at the destination. This concurs with previous studies that revealed that tourists with disabilities generally spend more time at a destination than conventional tourists (Var *et al*., 2011; Laise, 1991; Luiza, 2010; Hossain *et al*., 2003). A smaller but significant number spends between two and three nights (21%) while 20% said they go on day trips. While stays of a few nights are not very attractive to some destinations, they remain an important source of income for struggling destinations like Zimbabwe where on average, tourists spent two to three nights between 2007 and 2012 (ZTA, 2013). It is interesting to note that very few tourists with disabilities travel to national parks for a single night (8%). The study found that the frequency and duration of visits to national parks by PwDs are significantly determined by cost (41%) and accessibility (34%). In other words, the cheaper the vacation, the more PwDs are likely to partake. At the same time, the more accessible the destination, the more PwDs would visit.

It is important to note that 97% of PwDs use road transport to visit natural areas. The respondents argued that road transport is preferable to other modes of transport as it gives tourists an opportunity to view scenery along the way. They also preferred road transport due to the costs involved. Asked to motivate their choice of transport, most of the respondents argued that road travel is cheap and comfortable for PwDs. Some have their own vehicles and this makes it easier to pack their wheelchairs. One respondent said that vehicles help them share expenses especially when they travel as a group. Others said that they use road transport because it is the only available option. Furthermore, such transport is generally cheaper than air and water and, at times, rail travel. This becomes more pronounced when the person with disabilities travels with friends and family. Eighty-four percent of the respondents stated that they travel with others, with the majority travelling with more than three people (36%). This confirms earlier studies (Yau, McKercher, & Packer, 2004; Var, Yesiltas, Yaylı & Ozturk, 2011; Fredman & Tyrainen, 2010:181; Darcy & Durawalla, 1999) which found that PwDs usually travel

with family, friends or relatives and that this complicates travel planning and adds to the total cost per trip.

At the national park, tourists with disabilities prefer to stay in self-catering accommodation (34%), hotels (20%) and lodges (20%). The reasons for choosing self-catering accommodation have to do with cost, privacy and independence. The most common reason was cost; self-catering accommodation is cheaper than other forms of accommodation. However, one respondent said that they prefer self-catering accommodation because it keeps them from interacting with 'normal' people and affords them privacy.

During their visits to national parks, 68% of the respondents engage in game drives, 52% in scenic drives and 40% in bird watching. These findings support those of McAvoy *et al.* (2006:24); Cordell, (1999); and McCormick, (2001) who found that PwDs engage in the same activities as their able-bodied counterparts but are contrary to those of Jaquette (2005), who found that most PwDs are adventurous. The study found that at times, PwDs engage in activities that are even more challenging than those of so-called able-bodied persons.

In terms of expenditure per day, nature-based tourists with disabilities tend to spend less per person per day with the majority (38%) spending less than $50 per day per person and 35% spending between $50 and $100. Only 1% spent more than $1 000 per person per day. This is contrary to previous studies (Laise, 1991; Luiza, 2010; Hossain *et al*., 2003; Buhalis & Darcy 2011:187) that revealed that PwDs have a high propensity to spend.

5.2.3 Travel motivation

The first part of Section C of the questionnaire dealt with travel motivations. This survey also sought to establish PwDs' motivation for visiting national parks. Ego enhancement (54%) and health (36%) were considered to be important motivating factors by PwDs. The need for relaxation (39%) and escape from everyday life (32%) were regarded as very important while a love of nature (48%) and relaxation (39%) were regarded as extremely important. Previous studies have established that nature-based tourists in general travel for the same reasons as those listed above (Slabbert & Du Plessis 2013:4; Saayman *et al*.,2009; Saayman & Saayman, 2009; Kruger & Saayman, 2010; Van der Merwe *et al*., 2011; Bashar & Abdelnaser, 2011). The only difference is that ego enhancement and health-related reasons were highly rated by PwDs.

5.2.4 Accessibility challenges faced by tourists with disabilities

The respondents were asked to identify the accessibility challenges they had encountered while travelling to and in national parks. The greatest challenge faced by PwDs in national parks has to do with staff ignorance. Sixty-six percent of the respondents were of the view that park staff is not knowledgeable of the needs of PwDs. This confirms Snyman (2001) and Cavinato and Cuckovich's (1992) findings that ignorance on the part of staff members is a major source of frustration among PwDs when they visit tourist attractions. These results also support Patton's (2013) study that identified employee attitudes and perceptions as a challenge to accessibility of natural areas. One can assume that ignorance could be the cause for the unfriendly attitude that employees exhibit towards PwDs in national parks. He also identified the lack of ramps or very steep ramps as a serious challenge when it comes to the accessibility of national parks in South Africa. Inaccessible walkways (63%) and the absence of ramps (62%) were identified as other serious challenges that PwDs face in national parks. Half of the respondents had problems with transport to national parks and within these parks while 49% identified inaccessible restrooms as a serious challenge when one contemplates travelling to national parks. According to ELTIS (2001) and Snyman (2002), accessible transport is not restricted to road transport; it is also a problem in aircrafts. Passengers with disabilities struggle to embark onto the aircraft and when using ablution facilities since they are not made with the disabled in mind.

5.2.5 Accessibility expectations of people with disabilities in national parks

The last part of the questionnaire solicited the expectations of PwDs listing 108 statements drawn from the Parks and Benefits Master guide on accessibility of the Baltic Sea region and the Scandic Accessibility Standard for hotels (see chapter 3). The statements covered all areas of a national park including transport, parking, reception, game viewing, bird watching, water-based activities and camping sites. The respondents were required to rate these items in terms of importance to them when they visit national parks. Table 5.2 below shows the items that were regarded by more than 50% of the respondents as extremely important when one visits a national park. It is should, however be noted that these are not the only important factors; they are the ones that were considered extremely important. Other factors will also be considered in the development of the universal accessibility framework for national parks.

Table 5. 2: Accessibility expectations of tourists with disabilities

No.	Accessibility expectations	Frequency	Percentage
	Transportation		
	The vehicle, bus, coach is accessible to people with visual, mobility and hearing disabilities	96	54%
	Availability of low flow entrance into the bus, coach, train to allow for independence during boarding	97	53%
	Availability of seats suitable for persons with various disabilities on the coach, car, bus	97	54%
	Presence of restraining systems for safety during the ride	88	50%
	Handrails provided to assist passengers to cope with changes of level, ramps, a narrowing or a change of direction of the access path	92	51%
	On arrival		
	Adequate accessible parking, ideally 2 spaces, each at least 3.6 metres wide	98	54%
	Accessible parking must be clearly marked with the wheelchair symbol	100	56%
	Clear illuminated path between parking and entrance. Accessible to all, including wheelchair users	93	51%
	Access ramps at change of level, with maximum slope gradient of 1:12, at main entrance to the reception and the parking location	92	51%
	Main entrance door to be wider (minimum width of 800 mm)	92	51%
	Absence of steps and stair cases	96	53%
	Reception desk		
	Park employees who view me as a normal person	113	62%
	Accessibility to water-based activities		
	Availability of a wide path leading to the beach or water body, wide enough to accommodate persons using assistive devices	91	50%
	Trails/Paths/Walkways		
	Walking area free from hazards e.g., suspended objects, furniture	99	55%
	Bridges		

Accessible for visitors with disabilities, with fall protection - no steps.	93	52%
Safari and game drives		
Game drive vehicles are accessible to people with mobility and visual impairments	94	51%
Guides are knowledgeable about disability needs and wants	94	53%
There is safety and security for people with diverse disabilities	103	57%
Restrooms		
Are easily accessible from the trail, reception area or any other part of the park	103	57%
Smooth access without level differences in the form of steps or stairs	95	53%
Food outlets/restaurants		
Restaurant accessible by cane users, wheelchair users and people using other assistive devices	104	57%
The Guest Bedroom		
No steps or stair cases to the room	118	65%

It is interesting to note that of all the 108 accessibility statements in the questionnaire, 118 respondents (65%) regard the absence of steps and stair cases as extremely important. While this may have been caused by the skewedness of the respondents profile towards mobility impairments, it is a good indication that PwDs generally regard steps as inappropriate accessibility. This is supported by the principles of universal design (Mace *et al.,* 1991:1; Rains, 2004) which discourage the use of steps or stairs in all built environments. These principles propose that the absence of steps and stairs is not only good for people in wheelchairs but also for the aged, pregnant women and people carrying heavy luggage.

Sixty-two percent of the respondents said that being treated by employees like any 'normal' person is extremely important to them. While architects and technocrats are busy designing the technical environment for accessibility (Mace *et al*., 1991:1), many forget the functional aspects (softer issues) of disability. The findings of this study are quite different from other studies of disability which focused on the supply side (hardware) of disability. As revealed in this study, the human factor (software) is also very important. Safety (57%) was rated highly by PwDs when they visit national parks. One may assume that, due the fact that African national parks are endowed with all kinds of animals (including predators) safety becomes a very important element of the visitor's experience. This is more pronounced when it comes to PwDs simply

because of their disability. The fact that some cannot see, while others cannot walk puts them at greater risk.

The same percentage (57%) of respondents stated that accessible restrooms and restaurants are extremely important. Rest rooms should be accessible from the trail and any other part of the park (Parks & Benefits, 2007). They should also be accessible at the entrance and inside such that people with different forms of disabilities can access them with ease (Scandic Hotels, 2014). Restaurants must also be accessible to people with all types of disabilities, from the mobility to the visually impaired. According to the Scandic standard, the most affected are usually people in wheelchairs and those using white sticks (Scandic Hotels, 2014).

Fifty-six percent of the respondents feel that it is extremely important for the parking area at national parks to be marked with a wheelchair symbol to show that it is reserved for PwDs. Again, this percentage may have been influenced by the larger number of people with mobility impairments in the sample. The researcher's personal observations however confirmed that there is a general tendency by people who are not disabled to use parking reserved for those with disabilities. It is thus possible that many of the respondents may have found all parking bays occupied by the able-bodied, including those meant for PwDs.

5.2.6 Recommendations from people with disabilities

The last question on the questionnaire required people with disabilities to offer their recommendations to make national parks universally accessible. The following recommendations were deemed relevant to the study.

"Game drive vehicles must be suitable for people living with different types of disabilities, especially wheel chairs, and the ramp leading to the game drive vehicle must also be accessible to people with different disabilities."

"Stairs and steps should be clearly marked and lit when dark. Branches and signs should be tended so you cannot be hit in the head."

One respondent felt that people with hearing impairments should be prioritized while others were of the opinion that PwDs should be offered cheaper accommodation. Another believed that a special rate should be given to PwDs if service providers cannot meet their requirements.

They proposed that the special rate should be at 50% less than the standard rate in order to compensate for inaccessibility.

“Outside braais should be at wheel chair height” said one respondent. Another advocated for the provision of a place where dogs can safely relieve themselves without creating hazards or unpleasantness for others”.

In terms of information dissemination, one respondent suggested that TTY, SKYPE or SMS be available for deaf persons to communicate with the receptionist. It was further recommended that there be a flashing light when there is an alert and when someone is knocking at the bedroom door. Tour guides, receptionists and other employees must be taught basic sign language in order to communicate with people with hearing impairments. Some form of text messaging should be enabled on the room phones to enable deaf people who may want to order room service or contact the front desk, manager, or housekeeping. This would enable PwDs to communicate with staff directly from their room like any other guest

Furthermore, it was recommended that park employees should be patient, kind and understanding. Some campers with disabilities lamented having problems pitching their tents when they visit natural areas. These recommend that park employees assist them to pitch their tents.

Closely related to the above is the suggestion that employees be taught what accessibility really means. One respondent was offered a room which was considered disability friendly but they needed to climb 16 steps to get to the room.

According to another respondent, the move to make national parks universally accessible is a noble one because it promotes independence for PwDs. Taking cost into account (to provider and then passed on to visitors) and feasibility, parks authorities must prioritise accessibility needs and adopt a phased approach to implementation. This involves working on the most urgent issues first and the least urgent last.

People using wheelchairs recommended that roll-in showers be availed in bathrooms. They further recommended that sufficient space be availed in the bathroom, bedroom and around the bed in order to allow for free movement of the wheelchair and hassle-free transfer from the wheelchair to the toilet and bed.

Tourists with disabilities also recommended that reservation staff be professional. One respondent complained that after booking a wheelchair accessible accommodation facility, the

room was later given to an able-bodied person “who does not need it”. This shows a serious lack of professionalism. Another recommendation is that operators should not renovate merely for the sake of compliance. So-called renovated rooms, which are supposed to be accessible, still leave a lot to be desired. This was noticed at Kruger and Augrabies National Parks where existing bathrooms were changed without making the room bigger to be wheelchair accessible. The area is too small and cramped especially when the person with a disability needs help getting in and out the shower. Because there are now two people and the wheelchair, more space is required.

“I am a Spina Biffida, which means I have use of my arms but not my legs. I LOVE swimming but no parks make provision for disabled people to get into and out of the pool. I came across a resort that used a D'Bility Pool Ramp at the swimming pool that is made by HASS Africa. That allowed me to enter and exit the pool by myself without any assistance. I LOVED the ramp. I wish more parks would install this ramp so we as disabled people can get into and out of the pool without assistance. PLEASE, PLEASE, PLEASE LOOK AT THIS RAMP FOR YOUR PARKS!!!”

It was further recommended that accommodation providers at the park should provide a facility for the disposal of sharps for diabetics and other people who require regular injected medications. Refrigeration facilities should be availed for people who require refrigerated medication (such as insulin) and staff must be knowledgeable about local medical facilities, including pharmacies. Information about pharmaceutical regulations in the destination country for international visitors should be available, include any restrictions on medicines, regulations for getting prescriptions refilled, or receiving shipments of refills.

The above recommendations by PwDs provided very useful input in the development of the universal accessibility framework for national parks in South Africa and Zimbabwe.

5.3 RESULTS OF THE FACTOR ANALYSIS

Four factor analyses were conducted for this study due to the length of the questionnaire; three for the accessibility expectations of PwDs and one for travel motivations. The *Kaiser-Meyer-Olkin* (KMO) is a measure of sampling adequacy and a predictor of the appropriateness of the available data for a factor analysis. If the KMO value is more than .60, one can comfortably

proceed with factor analysis because the factors are significantly correlated (Steyn, 2000:1). For each of the factor analyses, the Barlett test of spericity was also performed and the total variance explained was determined.

5.3.1 Results of Factor Analysis 1: Accessing the National Park

This first factor analysis looked at items 1-27 of the accessibility expectations of PwDs in national parks. Factors identified in this analysis include parking and entrance (Factor 1), the reception area (Factor 2) and transport to the park (Factor 3).The correlation coefficients between the factors and the variables (in the vertical axis) in this factor analysis are presented in the pattern matrix in Table 5.3 below.

Table 5. 3: Results of Accessing the National Park

	Factor 1	***Factor 2***	***Factor 3***
Variable	***Parking & Entrance***	***Reception area***	***Transport***
Additional signage adjacent to bays "For help or assistance, call reception".	.918		
Distance from the parking area to the entrance to be less than 25 meters	.806		
Clear illuminated path between parking and entrance. Accessible to all, including wheelchair users	.785		
Availability of assistance from the car park to the reception	.754		
Adequate accessible parking, ideally 2 spaces, each at least 3.6 meters wide	.723		
Accessible parking must be clearly marked with the wheelchair symbol	.701		
Automatic open door or door operable with "automatic push plate", height 1200 mm if not automatic	.646		
Low height reception counter, accessible to guests of all sizes and disabilities	.635		
Absence of steps and stair cases	.609		
Low or no threshold at the entrance door	.596		

Access ramps at change of level, with maximum slope gradient of 1:12, at main entrance to the reception and the parking location	.575		
Clearly signage that attracts the attention of people with diverse disabilities	.561		
Contrast markings – used in all public indoor areas	.515		
Handrails provided to assist visitors to cope with changes of level, ramps, a narrowing or a change of direction of the access path	.475		
Main entrance door to be very wide (minimum width of 800 mm)	.482		
Contrasting colour of rug leading from entrance door to the reception desk		.925	
Cane holders attached to front of desk		.854	
Hearing loop in reception desk. Marked with symbol sign		.843	
Vibrating wake up/fire alarm device available to borrow. Clearly signed at desk		.818	
A receptionist who is able to understand, interpret and communicate in braille and sign language		.716	
Key areas clearly marked on the access path with solid ground surface indicators for people with visual impairments		.636	
Seating and table available close to front desk so that guests may sit down at registration		.566	
Vehicle, bus, coach accessible to people with visual, mobility and hearing disabilities			.787
Availability of low flow entrance into the bus, coach, train to allow for independence during boarding			.765
Presence of restraining systems for safety during the ride			.720
Availability of seats suitable for persons with various disabilities on the coach, car, bus			.623
Presence of a stable, non-slip access path to the bus station			.510
Cronbach's Alpha	**0.95**	**0.92**	**0.86**
MIIC	**0.58**	**0.63**	**0.55**
Mean	**3.98**	**3.38**	**4.12**

Standard Deviation	**0.91**	**1.13**	**0.87**

From this factor analysis, three factors were identified using the Oblimin rotation with Keiser normalisation. The three factors identified were *Parking and entrance* (Factor 1), *Reception* (Factor 2) and *Transport* (Factor 3). The overall KMO for the three factors was 0.94, which, according to statisticians, is excellent, as Field (2005:640) and Keiser (1974) regard any value above 0.60 as acceptable. The *p* value for the Barlett's test is < 0.01 which shows that the data is significantly correlated. The *Total Variance Explained* by the three factors is 67.10%. This means that these three factors account for 67.10% of the total variance. In other words, it is an indicator of goodness of fit among the factors.

The most important of these was *Transport*, with a mean value of 4.12 (SD=0.87), followed by *Parking and Entrance* with a mean of 3.98 (SD=0.91) and *Reception* area (mean=3.38, SD=1.13). It is interesting to note that factors with a higher mean have a lower standard deviation. However, all the means are positively skewed meaning that all these factors are very important.

5.3.1.1 Factor 1: Parking and entrance

Included in this factor are items to do with the availability of parking lots specifically designed for PwDs, parking that is clearly marked with a wheelchair symbol, and a solid, firm, smooth path that is free of obstacles with ramps at every level change. To cater for people with visual impairments, the path should be illuminated and/or marked with attention lines in contrasting colours. The Cronbach's Alpha (α) for this factor is 0.95 which is way beyond the recommended 0.70 (Field, 2005:668; 2009). This α value (0.95) shows that there is a higher internal consistency for the items within the factor. The Mean Inter-item Correlation (MIIC) for this factor was 0.58 which is statistically acceptable. Any MIIC above 0.15 shows that all the items in the factor are well correlated and is considered acceptable (Clark & Watson, 1995).

Document analysis and website reviews revealed that most national parks in South Africa and Zimbabwe do not offer transport to the park and around the park; rather, they offer self-drive tours (ZimParks, 2014; SANParks, 2014). This means that there should be appropriate parking

as one arrives at the national park. The absence of proper parking can turn away many potential visitors, or at least affect the visitor experience. According to Parks and Benefits (2007), the entrance to the main reception area is also very critical to the visitor experience. They argue that the path should be illuminated, ramped and free from obstacles. The door should not have a threshold in order to accommodate the aged, wheelchair users and the visually impaired.

5.3.1.2 Factor 2: Reception area

This factor included items to do with the reception door, the presence of contrasting colours leading to the reception desk, the availability of a hearing loop to borrow and the presence of a reception desk whose height is accessible to all people. The presence of a table and chairs as well as a walking stick holder at the reception are also covered in Factor 2.Though relatively lower than the other factors in terms of mean value (3.38), the reception area is very critical to the experiences of tourists with disabilities in national parks. The fact that its mean is above 3 means that tourists with disabilities still regard it as a very important factor. This is in line with the Scandic accessibility standard which recommends a reception area that is accessible in terms of the height of the reception desk as well as the attitude and knowledge of the receptionist (Scandic Hotels, 2013). The Cronbach's Alpha (α) of 0.92 shows, that, there is very high internal consistency among the variables in the factor. The mean inter-item correlation was 0.63 which is acceptable, while the standard deviation was 1.13.

5.3.1.3 Factor 3: Transport

Transport had the highest mean value of 4.12 (SD=0.87), which shows that it is the most important of the three factors in this factor analysis. This factor includes items to do with the accessibility of transport to the national park, availability of transport that can accommodate people of different embodiments, safety in the carrier, and low floor buses and coaches with appropriate seats for people with disabilities. The Cronbach's Alpha for this factor was 0.86. Though the lowest among the three factors, it is still very acceptable since it is way above the recommended 0.70 value. The mean inter-item correlation of 0.55 confirms that there is internal consistence in the data. This is in line with the literature which revealed that transport is a

serious challenge to park accessibility (ELTIS, 2001, Snyman, 2004). Many PwDs have a great desire to get to natural places but there is limited or no accessible transport to national parks. The majority of the transport that is available does not have low floors for easy entry by a person with visual impairment or someone using a wheelchair (Parks & Benefits, 2007).

5.3.2 Factor Analysis 2: Activities in the National Park

Five factors were established from Factor Analysis 2. These are trails (Factor 1), bird watching and game viewing (Factor 2), fishing and swimming (Factor 3), information accessibility (Factor 4) and interpretation (Factor 5). The factor analysis covered variables 28 to 70 of the accessibility expectations of PwDs. Table 5.4 below summarises the results of this factor analysis.

Table 5. 4: Results of Activities in the National Park

	Factor 1	***Factor 2***	***Factor 3***	***Factor 4***	***Factor 5***
	Trails	***Bird watching & Game viewing***	***Fishing & Swimming***	***Information accessibility***	***Interpretation***
	1	**2**	**3**	**4**	**5**
Handrails (with good grip) on both sides of ramps with gradients in excess of 1:16	.764				
Accessible nature trails within rest camps or within easy distance of accommodation or entrance points	.748				
Resting areas with tables and benches along the path	.585				
There are handrails with good grip on both sides	.585				
The material has a non-slip, smooth and even surface	.567				
Bridges accessible for	.552				

visitors with disabilities, with fall protection - no steps					
Solid rail for visitors with white sticks (diameter: 10 cm, top edge at 25 cm)	.449				
Railings on the fishing platform	.447				
Restrooms are easily accessible from the trail, reception area or any other part of the park	.442				
Rails and wheel guides on bird watching hides		.890			
There is smooth access to the bird watching hide		.877			
Benches to sit on at the bird watching hide		.821			
Game drive vehicles are accessible to people with mobility and visual impairments		.816			
Openings at heights of 70-140 cm where people can look out while seated		.776			
Guides are knowledgeable about disability needs and wants		.755			
There is safety and security for people with diverse disabilities		.420			
Wheel guides on fishing platforms			-.848		
Fishing rod holder/supporter at the fishing platform			.770		
Safe swimming areas clearly marked to cater for all disabilities			-.752		
Benches at the beach			-.746		

Smooth access to fishing platforms			-.717		
Availability of ramps that lead into the swimming area			-.679		
Guiding lines in the form of railings, stone edges, or logs at each edge of the path			-.627		
Having a guide on site			-.475		
Walking area free from hazards e.g., suspended objects, furniture			-.449		
Website equipped with audio descriptive material for visually impaired and other users				.658	
Moving around independently without an assistant				.518	
Surface must be low-vibration and easily trafficable by wheelchairs, solid, even, step less, anti-slip and joint less				.474	
Signs and maps are illuminated or tactile					.887
Park employees who view me as a normal person					.868
Information about the park available in braille and audio form					.850
Possibility for the visually impaired to bring their guide dogs					.848
Adequate text information for deaf people					.820
Signage is in large and audible form to cater for all					.807
Availability of a wide path leading to the beach or water body, wide enough to					.777

accommodate persons using assistive devices					
Entrance marked with lighting					.651
Where the natural environment prohibits full accessibility some form of virtual tour is available to accommodate visitors with disabilities (both physical and sensory)					.570
The bird watching hide is connected to an accessible path or vehicle					.507
Ramps leading to the water					.472
Cronbach's Alpha	**0.95**	**0.93**	**0.95**	**0.79**	**0.95**
MIIC	**0.66**	**0.61**	**0.66**	**0.56**	**0.63**
Mean	**3.98**	**3.94**	**3.81**	**4.18**	**3.76**
Standard Deviation	**0.89**	**0.90**	**0.99**	**0.90**	**1.01**

The overall KMO for the five factors was 0.90, which means the variables were highly factorable. As in the first factor analysis, the p-value was <0.01 which is statistically very significant. The *Total Variance Explained* by the three factors was 71.768% which means that these five factors accounted for about 72% of the total variance. Therefore there is goodness of fit among the factors. The factors are discussed one by one.

5.3.2.1 Factor 1: Trails

Trails, as a factor included items like availability of smooth barrier free trails, tactile and coloured trail edges, and ramps at level changes along trails. Other items in this factor include the presence of bridges along trails, handrails on both sides of the bridges and fall protection systems, among many other items. The mean for this factor was 3.98, which is the second highest among the five factors and the standard deviation was 0.89. Parks and Benefits (2007) confirm that trails are very important for the experiences of PwDs in national parks. This is especially important for national parks without very dangerous animals where tourists are

allowed outside their vehicles. The mean inter-item correlation for the factor analysis was 0.66. This value together with the Cronbach's alpha of 0.95 indicates that the data was reliable and that there is internal consistency.

5.3.2.2 Factor 2: Bird watching (Avitourism) & Game viewing

This factor had a mean value of 3.94, the third highest (SD=0.90) and included all items to do with bird viewing and game drives. The following items were included; accessible paths to bird watching hides, wheelchair space with wheel guides at the hide, benches at the hide, and openings at a height of 70-140cm where people can look out while seated. The availability of accessible game drive vehicles and guides who are knowledgeable about disability needs were also included in this factor (See Table 5.4). The Cronbach's alpha of 0.93 and mean inter-item correlations of 0.61 are quite high and indicate that there is perfect internal consistence since the items in the factor are significantly correlated.

5.3.2.3 Factor 3: Fishing & Swimming (water-based activities)

Factor three had a mean value of 3.81(SD=0.99), which is the fourth highest among the five factors. The items in this factor included accessible water bodies with ramps leading to the beach, a safe swimming area for persons with disabilities and benches at the beach. Also included in this factor were accessible fishing platforms, and fishing rod holders and wheel guides on the fishing platforms. Of interest in this factor is the fact that all the loadings among the variables are negative except for one. The measures of reliability for this factor yielded a high alpha value of 0.95 and internal consistence was confirmed by a mean inter item correlation of 0.66. In other words, all the items in this factor are very well correlated.

5.3.2.4 Factor 4: Information accessibility

With a mean of 4.18 and standard deviation of 0.90, factor four is the most important among the five factors in this factor analysis. The Cronbach's alpha and mean inter item correlation, are however, smaller (0.79 and 0.5, respectively) than for the other factors. The items in this factor are; the availability of websites equipped with audio descriptive material for visually impaired and other users, moving around independently without an assistant and surfaces that are firm, smooth, and non-slip for the easier movement of wheelchairs. The importance of this factor is emphasized by Snyman (2000) who argues that access to information has always been a major challenge for people with disabilities. He pointed out that in most cases, important information is not available in Braille and other non-text means of communication.

5.3.2.5 Factor 5: Interpretation

This factor had the following items: illuminated or tactile signs and maps, park employees who view me as a normal person, information about the park available in braille and audio form, the possibility of the visually impaired bringing their guide dogs, adequate text information for deaf people, and signage in large and audible form to cater for all, among others. It had the lowest mean (3.76) and a standard deviation of 1.01. It is important to note that the fact that the mean is the lowest among the five factors does not necessarily mean that this factor is not important. The mean is still skewed towards 5.0 which make it important. This factor had an α value of 0.95 and a mean inter-item correlation of 0.63. This confirms reliability and internal consistence among items. The importance of this factor is confirmed by Parks and Benefits (2007) and Patton (2013) who explain that there is need for interpretation centres for the visually and hearing impaired.

5.3.3 Results of Factor Analysis 3: Amenities

Three factors were established from this factor analysis: accommodation and dining (Factor 1), restrooms (Factor 2) and camping (Factor 3). The factors included variables 71 to 108 on the

modified Scandic questionnaire. The correlation coefficients between the factors and the variables are shown in Table 5.5 below.

Table 5. 5: Results of Factor Analysis 3: Amenities

	Factor 1	Factor 2	Factor 3
	Accommodation & Dining	Rest rooms	Camping
	1	2	3
No steps or stair cases to the room	.876		
Restaurant accessible by cane users, wheelchair users and people using other assistive devices	.819		
Smooth access without level differences in the form of steps or stairs	.770		
Easily accessible from the trail, reception area or any other part of the park	.742		
No threshold (ground beam)	.570		
Easy to operate door lock from the inside by means of a handle or an automatic system	.546		
Electrical socket at the desk reachable from a wheelchair	.539		
Coffee cups and glasses reachable from a wheelchair	.537		
Wide passage in main entrance (minimum 800 mm)	.533		
Water taps easy to operate - with single lever	.515		
Desk must be accessible by people with all kinds of disabilities	.472		
Wide passage in door (800 mm).	.469		
Buffets height between 850-900 mm. Accessible to all people	.464		
Towels accessible by people with diverse disabilities	.461		
Space under wash basin accessible to wheelchairs	.418		
Safety & Security Manual		-.969	
Toilet paper holder on armrest		-.862	
Sliding door		-.845	
It is possible to reach the washbasin/water taps		-.841	

when seated on the toilet			
Wardrobe without doors or with sliding doors		-.827	
Foldable armrests		-.761	
Rail for coat hanger height 1 200 mm		-.753	
Alarm in the bathroom		-.707	
Two peepholes in the door, one at the usual height and one at 1 200 mm		-.621	
Handrail on the inside of the door under door opener		-.561	
Wash basin minimum height 780 mm		-.525	
Mounted wall mirror, accessible to people of all sizes and abilities		-.522	
Single lever basin mixer		-.416	
Firm and stable surface designed to allow the use of tent stakes and other means of securing a tent			-.954
Wide tent platforms at least 1.2 meters around the tent			-.889
Tent platforms should have curbs, walls, railing or projective surfaces to prevent people from slipping off			-.885
Parking spaces at tent campsites at least 4 880 mm (16 feet) wide with a slope that does not exceed 1:50 in any direction			-.815
Availability of an accessible path leading to the camp site			-.753
Cooking surface between 380 mm and 865mm (15 to 34 inches) above the ground surface			-.681
Hairdryer accessible to the visually impaired and wheelchair users			-.561
One soap dispenser "special disabled range", reachable by wheelchair users and the visually impaired			-.474
Cronbach's Alpha	**0.97**	**0.96**	**0.95**
MIIC	**0.62**	**0.68**	**0.71**
Mean	**4.02**	**3.65**	**3.75**
Standard Deviation	**0.87**	**1.03**	**1.01**

For the three factors established, a KMO value of 0.948 was yielded. Again, this is higher than the recommended 0.60 (Field, 2005). The KMO value shows that the sample was adequate and the data was highly factorable. There was also a statistically significant relationship among the factors as revealed by the significant p-value which was 0.0000. A very high rate of the total variance explained by the three factors was yielded (70.65%) which means that 70.65% of the total variance was explained by the three factors. The results of each of the three factors are reported below.

5.3.3.1 Factor 1: Accommodation and dining

This factor had the highest mean of 4.02 and the lowest standard deviation of 0.87. This is interesting as it shows that accommodation and dining were considered the most important factors among the three. The items considered in this factor included accessible bedrooms, with no steps or staircases, wide passages and doorways, wardrobes without doors or with sliding doors, switches accessible to people in wheelchairs and reachable electrical sockets. The dining area should have buffet heights that can be reached by short people and those in wheelchairs and should be easily accessible to people with different disabilities. A Cronbach's alpha of 0.97 was yielded which shows that the data was very reliable and there is very high internal consistence. This is also supported by a high mean inter-item correlation of 0.62. Previous studies found that accommodation facilities have posed one of the greatest challenges to PwDs (Snyman, 2004; Darcy 2008; Rains, 2004; Buhalis & Darcy, 2011). There is therefore a great need for attention to this area.

5.3.3.2 Factor 2: Restrooms

Of the three factors in this factor analysis, it is surprising that restrooms had the lowest mean of 3.65 (SD=1.03). One would have thought that restrooms would be the priority area for national parks as is accommodation and dining (Darcy, 2008; Rains 2004) but this study does not support that thinking. Items on restrooms were to do with the access paths leading to the restrooms, the presence of a ramp into the restroom, the clear width of the door, and availability of foldable armrests, grab bars and single lever basin mixer (see Table 5.5). The Cronbach's

alpha was 0.96 while the mean inter item correlation was 0.68. Both values are very high and are a positive indicator of reliability and internal consistency.

5.3.3.3 Factor 3: Camping

This factor included items like an accessible path to camping sites, correct dimensions for camping platforms, camping tables at appropriate heights and cooking areas that are disability friendly. The mean value for this factor was 3.75 (SD=1.01), second to that of accommodation and dining. The Cronbach's alpha for this factor was 0.95 and the mean inter item correlation was 0.71 which was highest of the three. A high mean inter item correlation shows that the items in this factor are very highly correlated. It is also important to note that for this factor the correlation coefficiencies between the factor and the variables (items) are mainly negative (see Table 5.5).

5.3.4 Results of Factor Analysis for travel motivations

Apart from the factor analyses for accessibility expectations, a factor analysis was also performed for travel motivations (question 21 on the questionnaire). This sought to establish the most important factors that motivate PwDs to travel to national parks. Three factors were identified, enrichment, family/escape and adventure. The pattern matrix for this factor analysis is shown in Table 5.6 below.

Table 5. 6: Factor Analysis for travel motivations

	Factors		
	Factor 1: Enrichment	**Factor 2: Escape**	**Factor 3: Adventure**
To challenge yourself	.854		
To enhance your ego	.810		
To learn something new	.610		
To celebrate your ability to travel	.449		
To spend time with family		.816	

For health/wellbeing		.591	
To relax		.588	
To escape from everyday routine		.554	
For the love of adventure			-.722
Because it is an exciting thing to do			-.688
For the love of nature			-.676
Cronbach's Alpha	**0.63**	**0.65**	**0.76**
Mean of inter-item correlation	**0.35**	**0.31**	**0.45**
Mean	**3.04**	**3.75**	**3.71**
Standard deviation	**1.03**	**0.82**	**0.88**

The KMO measure of sampling adequacy yielded a value of 0.79, higher than the recommended 0.60. The p-value was statistically significant at <0.01 while the total variance explained by the three factors was 58.9%. The results of the three factors are discussed in this section.

5.3.4.1 Factor 1: Enrichment

With a mean value of 3.04 (SD=1.03), enrichment is the least important of the three factors in this analysis. However, the mean is on the high side making it an important motivator for PwDs. Variables included in this factor are to challenge yourself, to enhance your ego, to learn something new and to celebrate your ability to travel. The Cronbach's Alpha was 0.63 while the mean inter item correlation was 0.358. While the alpha value may be lower than the recommended 0.7, Kline (1999) cited in Field (2005:668) argues that values below 0.7 can realistically, be accepted because of the diversity of the constructs being measured. Based on that argument, the 0.63 value can be considered acceptable. The mean inter-item correlation for this factor is also acceptable since it is above the minimum of 0.15. Enrichment has been identified by previous researchers as an important travel motivation (Bashar & Abdelnaser, 2011).

5.3.4.2 Factor 2: Escape/family

Items within this factor included: to spend time with family, for health/wellbeing, to relax and to escape from everyday routine. This was the most important factor with a mean value of 3.75 and the lowest standard deviation (0.82). This finding is supported by the literature (Slabbert & Du Plessis 2013:4; Saayman *et al*.,2009; Saayman & Saayman, 2009; Kruger & Saayman, 2010; Van der Merwe *et al*., 2011) which notes that escape is a very important motivational factor among tourists. It is therefore clear that what motivates the able-bodied also motivates PwDs to travel to natural environments (Shi *et al*., 2012:229-231; Bashar & Abdelnaser, 2011). The α value for this factor (0.65) is bigger than that of enrichment but smaller than that of adventure. As in the case of enrichment in 5.3.4.1 above, the value is still acceptable as good measure of internal consistency (Field, 2005:668). The mean inter item correlation of 0.31, is also within the acceptable region which means that the items in the factor are well correlated.

5.3.4.3 Factor 3: Adventure

In this factor, the following items were identified: for the love of adventure, because it is an exciting thing to do, and for the love of nature. The mean value for this factor was 3.71 (SD=0.88) which is the second highest of the three means. This suggests that seeking adventure is a very important factor motivating PwDs to travel to national parks. The factor's Cronbach's alpha is the highest (0.76) which is supported by a relatively higher mean inter item correlation of 0.45. These figures confirm a high level of internal consistency and a strong correlation between items in the factor. The fact that PwDs seek adventure has been supported by many scholars (Jaquette, 2007; Anderson *et al.*, 1997; McAvoy *et al*., 1989; Robb & Ewert, 1987). These scholars argue that PwDs sometimes seek the most challenging activities in the outdoors.

5.4 RESULTS OF THE ANALYSIS OF VARIANCES (ANOVA)

An ANOVA was performed for the types of disabilities and the factors that were established from the factor analysis. This section reports on the results of the ANOVA.

5.4.1 ANOVA for type of disability and factors

An analysis of variances (one way ANOVA) was performed for the type of disability and all the factors in the three factor analyses. The mean values, standard deviation, p-values and effect sizes were calculated. P-values <0.01 were considered to be statistically significant (since any value smaller than 0.05 is considered to be statistically significant) while effect sizes (Cohen's d-values) were considered as follows: d=0.2 small; d=0.5 medium (acceptable) and d=0.8 large (Cohen, 1992:1). The Cohen's d-vales were calculated to determine practically significant differences between different categories of disabilities. Table 5.7 below provides a summary of the analysis of variances.

Table 5. 7: ANOVA of disability type and the factors

		N	Mean	Std. Deviation	*P-value*	Effect size		
						1 with 2	2 with 3	3 with 4
Parking_Entrance	1 Mobility	114	4.0808	.83104	.093			
	2 Hearing	18	3.6486	1.11563		0.39		
	3 Visual	31	3.7227	1.16572		0.31	0.06	
	4 Other	17	4.0905	.60827		0.01	0.40	0.32
	Total	180	3.9768	.91931				
Reception	1	112	3.1826	1.19195	.025			
	2	18	3.8796	.94290		0.58		
	3	31	3.5492	1.06108		0.31	0.31	
	4	17	3.7451	.87416		0.47	0.14	0.18
	Total	178	3.3707	1.14194				
Transport1	1	113	4.2650	.75566	.024			
	2	18	3.7861	.96464		0.50		
	3	30	3.8283	1.14136		0.38	0.04	
	4	17	4.0000	.84853		0.31	0.22	0.15

	Total	178	4.1177	.87737				
Trails	1	112	4.0024	.88144	.867			
	2	18	3.8846	1.09412		0.11		
	3	31	3.9200	.93314		0.09	0.03	
	4	18	4.1012	.74971		0.11	0.20	0.19
	Total	179	3.9862	.89586				
Bird_game	1	114	4.1303	.80128	.003			
	2	18	3.6551	1.05833		0.45		
	3	31	3.5278	1.01711		0.59	0.12	
	4	18	3.8214	.89160		0.35	0.16	0.29
	Total	181	3.9492	.90443				
Water_activities	1	113	3.8251	.98668	.536			
	2	18	3.7554	1.09503		0.06		
	3	31	3.6169	1.12789		0.18	0.12	
	4	18	4.0409	.71145		0.22	0.26	0.38
	Total	180	3.8039	.99826				
Information accessibility	1	113	4.1932	.93556	.501			
	2	18	3.8889	1.19913		0.25		
	3	31	4.2688	.69612		0.08	0.32	
	4	18	4.2778	.69780		0.09	0.32	0.01
	Total	180	4.1843	.90699				
Interpretation	1	113	3.6402	1.09398	.254			
	2	18	3.7970	1.05202		0.14		
	3	31	3.9892	.79455		0.32	0.18	
	4	17	4.0002	.75072		0.33	0.19	0.01
	Total	179	3.7506	1.01962				
Accom_Dining	1	113	4.1939	.74606	.005			
	2	18	3.7024	1.02170		0.48		
	3	31	3.6430	1.06886		0.52	0.06	
	4	17	4.0256	.83167		0.20	0.32	0.36
	Total	179	4.0331	.87099				
Restrooms	1	112	3.7617	.95807	.071			
	2	18	3.5203	1.01858		0.24		
	3	31	3.2378	1.21133		0.43	0.23	
	4	17	3.8299	1.09079		0.06	0.28	0.49
	Total	178	3.6526	1.03634				
Camping	1	113	3.8824	.94802	.055			
	2	18	3.4306	.96179		0.47		
	3	31	3.4146	1.23635		0.38	0.01	
	4	17	3.9191	.91637		0.04	0.51	0.41

	Total	179	3.7594	1.01520				

As the results of the ANOVA are discussed, it is important to note that the type of disability labeled 'other' is not included because it is not clear what these disabilities are. Although a category for "other disabilities" was included, this study focuses on people with mobility, hearing and visual disabilities.

Statistically significant differences between disabilities were found in reception (0.025), transport (0.024), bird and gave viewing (0.03), accommodation and dining (0.005) due to the fact that the p-value are smaller than 0.05, and camping (0.055) (borderline case).

From the Cohen's d-values above, it was established that accessible *parking and entrance* is much more important to people with mobility impairments than those with other disabilities. This is clearly shown by the effect size of 0.39 which is more skewed to medium (0.5) than to small (0.2). The differences in the means also testify to the same with mobility having a mean value of 4.08 while hearing has 3.64. This may be explained by the fact that most people with mobility impairments use assistive devices like wheelchairs, crutches and walkers and they need enough space when boarding or alighting from vehicles. They also need wide entrances to accommodate their devices (Parks & Benefits, 2007). However, people with hearing, and visual disabilities still regard parking and entrance as important as indicated by their means (3.64 and 3.72, respectively) although not as much as people with mobility disabilities.

Another important difference is that people with hearing impairments regard accessible *reception* as very important compared with people with visual and mobility impairments as shown by the effect size of 0.58 which shows a medium practical significance. This is supported by the mean of 3.879, which is higher than any other mean on this factor. These results make sense since people with hearing disabilities are more prone to neglect especially when the receptionist is not knowledgeable about sign language and there is no hearing loop at the reception (Scandic Hotels, 2014).

According to the Cohen's d-values, accessible *transport* was considered more important by people with mobility impairments (mean=4.265) than those with visual (3.83) and hearing impairments (3.78). The effect sizes of 0.50 and 0.38 show that there are medium practically significant differences in the perceptions of the mobility impaired compared with people with hearing and visual impairments. As noted, the use of wheelchairs and walkers make boarding

and disembarking very difficult for people with mobility impairments. Furthermore, there is need for a safe seating position for such in order to avoid falling or slipping (Parks & Benefits, 2007).

People with mobility impairments regard accessible *bird watching hides and game viewing* as more important than people with hearing and visual impairments as shown by the d-values (effect sizes) of 0.45 and 0.59, respectively. A very high mean value of 4.13 for the mobility impaired compared with 3.65 for the hearing impaired and 3.52 for the visually impaired support this difference. The practical significance can perhaps be explained by the fact that while people with mobility impairments have problems with movement, they can see and hear properly; therefore they would want the viewing platforms to be more accessible than their counterparts with hearing and visual disabilities.

Accessible *accommodation and dining* were considered to be more important by people with mobility impairments (mean=4.19) than by those with visual impairments (3.64) and hearing impairments (3.70). This is also shown by the effect sizes of 0.48 and 0.52 which show that there is a practically significant difference between the views of the mobility impaired and those of the hearing (0.48) and visually impaired (0.52). The practical significance is however medium. This means that people with mobility impairments value accessible dining and accommodation much higher than their counterparts with hearing and visual impairments. An explanation for this can be found in Patton's accessibility status report for SANParks which shows that limited accommodation is available for persons with mobility challenges in national parks, especially those using wheelchairs (Patton, 2013). The Scandic accessibility standard also recognises that in most cases, buffet tables, cups and plates are usually very high such that people using wheelchairs cannot reach them (Scandic Hotels, 2014).

The visually impaired had the lowest mean value (3.24) when it comes to the importance of accessible *restrooms*. Compared with persons with hearing and mobility impairments, the visually impaired view the accessibility of rest rooms as less important.

More respondents with mobility challenges indicated that *camping facilities* need to be universally accessible than those with hearing and visual impairments. The mean was 3.88 compared to 3.43 for hearing and 3.41 for visual impairments. The effect sizes of 0.47 and 0.38 show that the differences have a medium practical significance. In other words, while the hearing and visually impaired rate accessible camping important, the mobility impaired regard it as more important. It is useful to note that there was no statistically and practically significant difference in the perceptions of people with these different impairments when it came to trails,

swimming and fishing, and signage and information as well as interpretation. However it is clear from this research that people with mobility impairments rate most aspects as important.

5.4.2 ANOVA for travel motivations

An analysis of variances was performed for travel motivations and p-values <0.01 were considered to be statistically significant. Effect sizes were also calculated to establish values differences that were practically significant among the disability categories with Cohen's d-value, d=0.2 being small, d=0.5 medium and d=0.8 large. As in the first ANOVA, the disability category labeled "other" was not considered in interpreting the results. Table 5.8 below gives a summary of the variances.

Statistically significant differences between the different disability categories were noted in adventure (p=0.055) and enrichment (p=0.018). Using Cohen's d-values, it was established that people with hearing impairments seek adventure more than those with mobility and visual impairments.

This is shown by the effect size of 0.67 which means that the difference between the way the hearing and the mobility impaired value adventure as a travel motivation is practically significant. The effect size of 0.41 between hearing and visually impaired also shows that the difference is practically significant. This is further supported by the means where hearing has a mean value of 4.215 while mobility and visual impairments have 3.62 and 3.86, respectively.

Table 5. 8: One-Way ANOVA for Travel Motivation and Disability

		N	Mean	Std. Deviation	P-value	Effect size		
Adventure	1Mobility	114	3.6213	.89335		1 with 2	2 with 3	3 with 4
	2Hearing	17	4.2157	.85749		0.67		
	3Visual	30	3.8667	.71973		0.27	0.41	
	4Other	19	3.6842	1.00906		0.06	0.53	0.18

	Total	180	3.7250	.88831	0.055			
Enrichment	1	105	2.9540	.97182				
	2	15	3.6611	.92821		0.73		
	3	27	2.7963	1.17063		0.13	0.74	
	4	19	3.3991	1.04917		0.42	0.25	0.51
	Total	166	3.0432	1.03380	0.018			
Escape	1	109	3.7332	.83594				
	2	17	3.9461	1.04580		0.20		
	3	29	3.8563	.65386		0.15	0.09	
	4	19	3.5702	.80998		0.19	0.36	0.35
	Total	174	3.7567	.82717	0.503			

The Cohen's d-values also revealed that there is a practically significant difference between the hearing and mobility impaired (d=0.73) and hearing and visual impaired (d=0.74) in terms of the power of enrichment as a motivation for visiting national parks. This means that people with hearing impairments consider enrichment a very strong motivational factor (mean=3.66) compared with people with mobility (mean=2.95) and visual impairments (mean=2.79). The practical significance is also medium to large as shown by the effect sizes that are closer to 0.8 (d=73 and d=0.74).

5.5 SPEARMAN'S RANK ORDER CORRELATION

Using Spearman's rank order correlations, a test was run to establish the relationships between the demographic variables and the different factors that were identified in the factor analysis. Effect sizes were considered as follows: r=0.1 small; r=0.3 medium; r=0.5 large. Table 5.9 below summarises the relationships.

Table 5. 9: Spearman's rank order correlation

		Type of education	Extent of visiting nature-based tourism areas	Nature of trips	Length of stay at the destination	Amount spent, per person, per day	Age
Parking_Entrance	Correlation Coefficient	-.079	-.072	-.038	-.070	-.009	.068
	Sig. (2-tailed)	.287	.342	.623	.358	.903	.360
	N	184	177	170	173	170	183
Reception	Correlation Coefficient	-.195**	-.258**	-.072	-.130	-.001	-.160*
	Sig. (2-tailed)	.008	.001	.352	.091	.990	.032
	N	182	175	168	171	168	181
Transport1	Correlation Coefficient	-.093	-.150*	-.084	-.107	-.018	-.007
	Sig. (2-tailed)	.213	.048	.280	.162	.819	.928
	N	182	175	168	171	168	181
Trails	Correlation Coefficient	-.024	-.075	-.023	-.089	.027	.079
	Sig. (2-tailed)	.747	.323	.764	.248	.723	.290
	N	183	176	169	172	169	182
Bird_game	Correlation Coefficient	-.041	.111	.049	.069	.069	.214**
	Sig. (2-tailed)	.582	.142	.524	.369	.372	.004
	N	185	178	171	174	171	184
Water_activities	Correlation Coefficient	-.102	-.126	-.027	-.133	.072	-.026
	Sig. (2-tailed)	.168	.094	.726	.080	.353	.723

	N	184	177	170	173	170	183
Information accessibility	Correlation Coefficient	.024	.017	.002	-.010	-.052	.157*
	Sig. (2-tailed)	.742	.822	.978	.899	.503	.034
	N	184	177	170	173	170	183
Interpretation	Correlation Coefficient	-.043	-.110	-.037	-.080	-.065	.012
	Sig. (2-tailed)	.568	.146	.635	.298	.398	.869
	N	183	176	169	172	169	182
Accom_Dining	Correlation Coefficient	-.096	-.038	-.034	-.014	.052	.123
	Sig. (2-tailed)	.195	.620	.662	.860	.499	.098
	N	183	176	169	172	169	182
Restrooms	Correlation Coefficient	-.164*	-.166*	-.167*	-.090	.074	.015
	Sig. (2-tailed)	.027	.028	.030	.239	.343	.843
	N	182	175	168	171	168	181
Camping	Correlation Coefficient	-.153*	-.025	-.012	-.037	.023	.116
	Sig. (2-tailed)	.039	.742	.875	.626	.767	.118
	N	183	176	169	172	169	182

**** p<0.01 and *p<0.05**

Based on the correlation coefficiencies, the following was established:

For reception, it was established that there is a negative correlation (r=-0.195) between level of education and perceptions of the accessibility of the reception at the national park. In other words, the higher the education, the less important an accessible reception is and the reverse is also true. It was also established that the number of visits (extent to which one visits natural areas) is negatively correlated (r=-0.258) to the visitor's value of an accessible reception area. In other words, the less the extent of visits, the more one is worried about the accessibility of the

park reception. The more one visits national parks, the less they value an accessible reception area. Older people also seem to worry less about the accessibility of the reception compared to the young (r=-0.160).

In terms of transport, it was revealed that the fewer the visits, the more important the transport. This is shown by the negative correlation (r=-0.150) between the extent of visits and the transport. The more frequently one visits national parks the less one regards accessible transport as important.

There is a positive correlation (r=0.214) between age and the need for more accessible bird watching hides and game viewing platforms or game drives. In other words, the older one becomes the more they need accessible game viewing and bird watching facilities. A further observation is that there is a positive correlation (r=0.157) between age and information accessibility. People who are older would like to access information about national parks more easily than those who are younger. These results show that when older people define the accessibility of a national park, they begin by assessing whether information about the park can be accessed without difficulty. It is also true that older people have less access to internet and do not understand how it works or how to use it to get information. Perhaps, parks are failing to capture the golden years' market because there is no information about the parks within their reach.

Perhaps the least expected outcome was that there is a negative correlation (r=-0.164) between education and the need for more accessible restrooms. The higher the education, the less important accessible restrooms are, and the reverse is also true. It was also established that there is also a negative correlation between the extent to which one visits parks and the value they put on accessible restrooms (r=-0.66).The less one visits, the more important accessible restrooms are. As the extent of visits increases, PwDs regard accessible restrooms as less important.

Accessible restrooms are also negatively correlated (r=-0.67) to the nature of one's trips. The more international the trips, the less one is worried about accessible restrooms and the more local the trips, the more one values accessible restrooms.

Finally, accessible camping is more important to people with less education than it is to people with higher education. In other words, there is a negative correlation (r=-0.153) between increase in education level and the importance attached to accessible campsites in national parks.

5.6 RESULTS OF THE QUALITATIVE STUDY

As alluded to earlier, a mixed method approach was adopted in this study where both the quantitative and qualitative methods were used. The following section reports the results of the qualitative study.

5.6.1 Introduction

In order to come up with more detailed data and to complement the quantitative study, a qualitative approach was also adopted for this study. Two panel discussions were held; the first with representatives of disability organisations and the second with parents of children with disabilities. This was from the demand perspective. From a supply orientation, two sets of interviews were conducted. The first set involved the national parks headquarters of South Africa and Zimbabwe where the Project Manager-Tourism (SANParks) and the Business Development Manager (ZimParks) were interviewed. The second set involved eight park managers (or their representatives), four in South Africa and another four in Zimbabwe. This section reports on the findings of the qualitative study.

5.6.2 Panel discussion with representatives of disability organisations

As alluded to earlier, this study also involved a panel discussion with representatives of organisations that deal with people with disabilities.

5.6.2.1 Organisations and types of disabilities represented

The participants in the panel discussions were representatives of the following organisations: Disabled Women Support Network (mobility disabilities), Danhiko Project (various disabilities), Faith, Love and Hope Trust (various disabilities), National League for the Blind (visual impaired),

Jairos Jiri Association (various disabilities) and Leonard Cheshire Home (mobility impairments). These organisations represent people with all forms of disabilities including the blind, the mobility impaired and the visually impaired, among many others. Two of the participants were directors of the disability organisations while the others were members but all had disabilities.

5.6.2.2 Visits to national parks

Three of the six participants had visited national parks. Of the three, two were directors of disability organisations while the other was a member. One of the directors who had never visited a national park had this to say: "*Imagine at my age, I have never been to a national park. I have a strong desire to go there but I am not sure if the parks are navigable by wheelchair users. If the built environment is not accessible, then the jungle must be worse".*

Asked why they had not visited national parks, two of the participants said that they had never had an opportunity to do so. The other respondent viewed travelling as the preserve of the able-bodied and the elite. According to Snyman (2004) one of the reasons why people with disabilities fail to participate in tourism activities is the lack of information pertaining to the accessible facilities.

5.6.2.3 Challenges faced

The researcher sought to establish the major challenges faced by those who had been to national parks. All the respondents agreed that national parks, especially in Zimbabwe were not accessible to PwDs. The first lamented that park employees viewed people with PwDs as helpless and a burden. She said that she hates to be treated as an aid seeker when she can do things for herself. The second respondent said he had problems accessing the reception area because of steps. He further argued that the terrain was too rough for wheelchair users. The third respondent had serious challenges with the ablution facilities within the park. She said that the pit latrines were not suitable for people with disabilities since there are no grab bars and the toilets are not spacious. These findings are in line with previous studies that also revealed that attitudes of employees and architectural barriers are among the challenges that people with disabilities face when they visit tourism facilities (Ross, 2002:151; Snayman, 2004).

5.6.2.4 Accessibility of national parks in Zimbabwe

The three representatives of disability organisations who had visited national parks agreed that national parks in Zimbabwe are not accessible to PwDs. One regretted ever travelling to a national park:

"*How can one be expected to push a wheelchair through the sand? I am sure the parks were never meant for people in my condition."*

5.6.2.5 Recommendations

The representatives of disability organisations were asked to make recommendations on behalf of their members. All participants offered recommendations regardless of whether or not they had ever been to a national park. Their recommendations were based on either their experiences or their accessibility expectations. The following recommendations were made:

- Enough parking should be reserved for PwDs.
- Ramps must always be provided especially when there is a level change along pathways.
- There should be a policy that ensures that all tour operators have at least a vehicle or two that are disability friendly. This would help especially when PwDs want to go on game drives and bird watching, among other activities.
- Toilets should be disability friendly, with ramps at the entrance, wide doorways and grab bars inside.
- There should be no steps to bedrooms, restaurants and other public areas and bedrooms must have enough space for persons using wheelchairs. All switches and electrical sockets must be accessible to all people. A roll-in shower and shower chair should be provided in each bathroom.

- Doors to toilets and bedrooms should open from the inside out and should not be heavy. If possible, sliding doors should be provided.

It appears that all the recommendations suggested by these people with disabilities were also suggested by the Scandic Hotel (2014) and Parks and Benefits (2007).

5.6.2.6 Prospects of people with disabilities vising national parks

Asked whether PwDs would visit national parks should the above recommendations (in 5.6.2.5) be implemented, the participants had various views. One respondent was of the opinion that PwDs need to be informed of the presence of accessible facilities before they plan a trip to national parks through brochures and websites. He felt that most advertisements are not meant for PwDs since nothing in the advert mentions accessibility issues. Without proper information, very few PwDs would visit national parks.

Another respondent had this to say: “Accessibility is one issue but there are many other issues to address before people with disabilities start to visit national parks. One cannot spend money (which they don’t have) on leisure before meeting their day to day needs. In Zimbabwe, I think we still have a long way to go because people with disabilities can visit national parks.” These sentiments support the view that in some countries, PwDs are ‘the forgotten tribe’ and still live in abject poverty (Choruma, 2007). In other words, accessibility should go beyond physical access to economic access as well as information access. If these are addressed, PwDs in Zimbabwe would visit national parks.

5.6.3 Panel discussion with parents of children with disabilities

On 20th August 2014, a panel discussion was conducted with parents of children with disabilities at Batsiranai Centre in Dzivaresekwa suburb of Harare, Zimbabwe. In Zimbabwe, pupils and students are a big market for tourism and recreation centres, particularly national parks and museums (ZimParks, 2014; ZTA, 2010). It is against this background that the researcher saw fit

to meet with parents of children with disabilities to obtain their views and opinions on the accessibility of national parks. Thirteen mothers participated in the panel discussion.

5.6.3.1 Types of disabilities and age of the children

The prevalent types of disabilities among the children of the participants were mobility (n=6), visual (n=4), hearing (n=2) and autism (n=1). Of the mobility impairments, cerebral palsy was the most common physical condition. Seven of the thirteen children were of school going age, six of which were in primary school and one in secondary school.

5.6.3.2 Participation of children in school trips

None of the children had participated in trips organised by their schools, yet all the mothers acknowledged that their respective schools frequently organise educational trips for their pupils. The major reasons given were as follows. The first respondent lamented the cost of such trips which are usually beyond their reach:

"We *struggle to pay for transport to get our children to school every school day, we cannot afford to pay for school trips. Let those whose parents have the money go.*"

Another mother had this to say: *"Teachers are usually not prepared to take responsibility for disabled children when they out for trips so our children are left out. At times we are not even told that there will be a trip."*

The nature of the transport was also of concern to the parents, especially for children who use wheelchairs. They argued that the mode of transport (normally buses) is usually not accessible to children with disabilities. One of the mothers of a child with visual impairment was of the opinion that there is no need for their children to visit national parks with those who are sighted because it will not benefit them. "*When others are seeing animals and cheering, what will my child be doing*?" she asked. All the mothers felt that their children's condition poses a challenge to other people; therefore it would be better to not cause inconvenience by not sending their children on the school trips.

5.6.3.3 Parents' travel patterns with their children with disabilities

Asked whether their children like natural areas or not, all the parents said that their children, like any other children, like new experiences and desire to visit natural areas despite their disabilities. Of the 13 parents, only four had ever taken their children to wildlife areas. One parent said it was her custom to take her children on outdoor excursions every six months or so.

Those who never took their children to the wild lamented the lack of time and money to do so. One parent had this to say:

"Just staying with a child with disabilities at home is a mammoth task, let alone travelling with him to natural areas. I don't think I have the time."

Besides the time, money was identified by ten of the 13 parents as a major constraint. One would need to buy fuel or hire a taxi to the national parks because it is difficult to use conventional transport. This finding is supported by Choruma (2010) who lamented the high levels of poverty among people with disabilities in Zimbabwe. Three parents said that they do not know whether or not the national parks are accessible; fear of the unknown hinders them from taking their disabled children outdoors. Snayman (2004) supports the idea that people with disabilities at times do not know where to go because they are deprived of information. They would rather stay at home than venture into the unknown and compromise the safety of their already vulnerable children.

The four parents who had taken their children to natural areas said they had taken them to botanical gardens near their home area (n=3) and to the snake park (n=1). The majority (69%) of the parents of children with disabilities would like their children to visit national parks while the remainder felt it would not add value to their children because of the nature of their disabilities (visual).

5.6.3.4 Challenges likely to be faced when visiting national parks

Since the majority of the parents had never taken their children to natural areas, the researcher wanted to establish what challenges they anticipated if they were to visit national parks. From these challenges, one can determine the expectations of parents of children with disabilities.

The first challenge that was mentioned was inaccessible transport to the national parks, especially given the fact that most of the children have mobility limitations. The other challenge was children's safety in the wild. One parent felt that her child might not be safe especially given the fact that most national parks in Zimbabwe are home to predators. Financial challenges were once again raised:

"*The costs involved in travelling for leisure is prohibitive for the able bodied, let alone, people with disabilities."*

5.6.3.5 Attributes of an accessible national park

Whether or not they had been to a national park, the parents of children with disabilities had the following in common. They considered an accessible national park as one with the following attributes:

- No steps and accessible toilets
- Paths that are wheelchair accessible
- Safe for children
- Accessible vehicles to and within the national park

5.6.4 Supply Side-Interviews

The qualitative study also investigated the supply side where the views and opinions of the suppliers of the nature-based tourism product were sought. Two sets of interviews were organized and conducted. The first was with national parks headquarters for both South Africa and Zimbabwe. The second interview set involved interviews with eight regional park managers (or their representatives), four in Zimbabwe and four in South Africa. The results from the interviews are discussed below.

5.6.4.1 Interviews with National Parks Headquarters

On the South African side, the Project Manager-Tourism was deemed a key informant for this study since he heads the tourism activities of South Africa National Parks (SANParks). In Zimbabwe, the researcher was referred to the Business Development Manager (BDM) (Non-Consumptive Tourism).

5.6.4.1.1 Universal Accessibility Policy

The Project Manager for SANParks said that the organisation has a universal accessibility strategy/'policy' and a universal accessibility protocol. The reason why the policy is in quotation marks is that, it is still in draft form and has not yet been passed by the SANParks board. However both the strategy and the protocol are active on the SANParks portal and are used and reviewed by the organisation's parks and employees in conjunction with the many support appendices on required universal accessibility standards and industry doctrine. However, he conceded that the 'policy' is not being fully implemented throughout the country.

In Zimbabwe, the Parks and Wildlife Management Authority of Zimbabwe (ZimParks) referred the researcher to the BDM (Non-consumptive tourism) who said that his organisation did not have a universal accessibility policy or strategy. Already, the results reveal a discrepancy between South Africa and Zimbabwe in terms of their approaches to disability issues.

Asked why there is no universal accessibility policy, the BDM for ZimParks argued that policies are normally a response to situations, risks, threats and opportunities and the organisation had not perceived any problem or opportunity in the area of accessibility. Since others are seeing an opportunity for serious tourism business in PwDs (United Nations, 2009; APEC, 2003, Jaquette, 2005), it is surprising that ZimParks has not yet realized this opportunity.

5.6.4.1.2 Accessibility of South African and Zimbabwean National Parks

The Projects Manager at SANParks highlighted that South African national parks are accessible both to a moderate and greater extent. He explained that some disabilities are adequately catered for while others need more attention. Tourists with mobility impairments are better catered for than any other disability. The findings concur with the SANParks 2013 Status Report on universal accessibility (Patton, 2013) and the website information which shows that most of the national parks in South Africa are more accessible to people with mobility impairments than other impairments. This confirms the thinking that people with mobility challenges have been used as the standard to measure disability in many spheres; no wonder most disability symbols have pictures of people in wheelchairs (Mace *et al*., 1991). However the statement that some disabilities are adequately catered for might be an overstatement given that even the mobility impaired still complain that there are too few accessible units, especially if groups of people using wheelchairs are involved (Patton, 2013).

Like SANParks, ZimParks said that their national parks are accessible to a moderate extent. According to the researcher's personal observations in the national parks, they are either not accessible at all or accessible to a very limited degree. This is due to the following observations:

i. There are no designated parking areas for people with disabilities in most of the national parks. Where parking is available, it does not meet the universal accessibility requirements in terms of width.

ii. While some (e.g., Gonarezhou, Hwange) of the national parks have pavements at the reception or office area, there are no ramps into the offices which makes them inaccessible to people with mobility challenges and the blind.

iii. Game viewing platforms and bird watching hides are totally inaccessible to people with disabilities, especially at Hwange National Park where the platforms are very high and only accessible via steps.

iv. No bedrooms or lodges are designed to cater for PwDs. In other words, when these accommodation facilities were built, PwDs were not borne in mind. The same applies to public toilets.

5.6.4.1.3 The need to make national parks universally accessible

Both SANParks and ZimParks are of the opinion that universal accessibility is a worthwhile cause for national parks. In the words of the SANParks Projects Manager:

"Worthwhile is not strong enough a word - it is imperative. Universal accessibility means accessibility to everyone, regardless of one's physical, sensory and cognitive ability and thus achieving it means you are providing a destination accessible to everyone."

His ZimParks counterpart had this to say:

"Yes. Because the nature of the Authority's operations is that it offers a service to the public. This therefore means that the public may not be discriminated against in any way. Universal accessibility caters for all people (especially citizens) and enables the public to have meaningful interaction with the Authority and the resources therein. Tourism, being one of the pillars of the economy requires a certain level of access by the public at any time."

These responses clearly show that it is not debatable whether or not national parks should be universally accessible. The major question may be the motivation for making national parks accessible to all. According to SANParks, there is sustainable demand for universally accessible national parks. This is confirmed by previous studies which show that PwDs are indeed a viable market and a niche worth pursuing (APEC, 2003:5; United Nations, 2009; Darcy *et al*., 2010; Buhalis, 2005; Darcy 2002). In other words, apart from the issue of disability rights, it makes economic sense to make national parks universally accessible. However, the BDM for ZimParks does not take it the same way. He feels that the disability market is not a viable one and that universal accessibility should simply be based on legislative obligations rather than from a business perspective. On further probing, the researcher discovered that ZimParks perspective was mainly based on the nature and status of PwDs in Zimbabwe, who are mainly poor and relegated to the margins of society (Choruma, 2010; Mandipa, 2013; Khupe, 2012). This observation may seem correct if one does not have a global perspective of the accessibility market. While Zimbabwean PwDs may not have the propensity to travel, the same cannot be said for those from Australia, Europe, the USA and other countries.

5.6.4.1.4 Type of disability to be prioritized

According to ZimParks, access priority should be given to people with mobility impairments since they are most affected by the terrain and landscape of national parks. SANParks management felt that, while all disabilities should be prioritized, because access for mobility impaired visitors requires the greatest modification to physical facilities, it has received the most attention in the form of ramps, adapted accommodation and public ablution facilities, nature trails, hides and picnic sites. Ensuring that all people, regardless of their disabilities have access to national parks is in line with the principles of universal design and universal accessibility (Mace, 1991:1-4; Rains, 2004; Buhalis & Darcy, 2011). This study aims to ensure that national parks are accessible by anybody despite their abilities or lack thereof.

5.6.4.1.5 Challenges faced in making national parks universally accessible

According to the ZimParks' BDM, the major challenge is the absence of specialized skills and equipment to cater for the visually and hearing impaired. He further argued that universal accessibility requires substantial financial resources for procurement and training, which are not easy to mobilise at the moment. The Projects Manager at SANParks said that knowledge and understanding are the most serious challenges. However, he believes that this awareness is gradually gaining momentum as universal accessibility is recognised as the right and sensible thing to do from both an equity and economic point of view. One can perhaps conclude that on the Zimbabwean side, the challenge has more to do with human and financial resources while in South Africa, it is the lack of awareness among stakeholders.

5.6.4.1.6 How to make national parks more universally accessible

Asked what could be done to make national parks more universally accessible, the SANParks respondent had this to say:

"It is a process that SANParks has paid a lot of attention to over the last decade and more, but there is always more that can be done as society's understanding of how to provide universally accessible facilities expands and improves. In some cases more money and effort invested in the process is required, but in others it just requires a little bit of attention and knowledge passed on by those familiar with the requirements. "

The respondent from ZimParks said:

"First a policy to make them more accessible would need to be developed, and then resources be mobilised to ensure that all the areas that are targeted and key to universal accessibility are prioritised for development."

It is clear that neither of the two national parks authorities disputes the need for universally accessible national parks. SANParks has already made strides as reported in the SANParks status report for 2013. The outcome of this study is however expected to contribute to the policy that is being drafted by SANParks. It is also expected to guide ZimParks on the road to universal accessibility.

5.6.4.2 Interviews with park managers/hospitality managers

As noted earlier, the qualitative study also involved park managers (or their representatives) in order to cross reference what was said by the headquarters. Furthermore, the park managers on the ground know what is or is not happening with regard to universal accessibility. This section reports on the findings from the interviews with park managers in both South Africa and Zimbabwe.

5.6.4.2.1 Availability of a universal accessibility policy

It was surprising to find that park managers in South Africa had different responses to the question of whether or not they had universal accessibility policies. One of the four park managers who were interviewed said they had universal accessibility framework while two said

they did not and the last said that, while their national park did not have its own universal accessibility policy, it was covered by the SANParks policy. This confusion supports the Projects Manager's statement that the draft universal accessibility strategy has not been fully implemented in all SANParks national parks. Asked who is responsible for the implementation of the universal accessibility policy, one manager said the Hospitality Services Manager was responsible. Another said SANParks headquarters is responsible for the implementation of the policy. However, the national park that had a universal accessibility policy lamented that the policy has only been partly implemented; for example, a few rooms (two in every 20) are adapted to disability needs. This supports the literature that argues that when it comes to disability policies, implementation has always been a problem (Fisher, Miller & Sidney, 2005).

In Zimbabwe, all four managers admitted that their parks did not have any policy on universal accessibility, echoing the Business Development Manager. This implies that in Zimbabwe there is a need for both the development of a universal accessibility policy and its implementation. This study may provide a solution to the problem at hand.

5.6.4.2.2 Legislation governing universal accessibility in South Africa and Zimbabwe

According to two park managers in South Africa, universal accessibility is governed by the SANParks guidelines on universal accessibility. The other two were not sure which legislation governs universal accessibility. Their Zimbabwean counterparts were quick to say that the Constitution of Zimbabwe is the supreme law of the land and governs universal accessibility in national parks. However, two managers said that there was no law that governed universal accessibility in Zimbabwe.

5.6.4.2.3 Visitor patterns of tourists with disabilities

Apart from one South African national park (Marakele) which recorded between 201 and 400 visitors with disabilities per year, the remaining national parks (among the selected in both Zimbabwe and South Africa) had less than 100 tourists with disabilities. One South African and all the Zimbabwean national parks did not keep statistics of visitors with disabilities. However, all

the national park managers agreed that the number of tourists with disabilities in their parks was still very small. Surprisingly, the national park that received more than 200 tourists with disabilities said the number was increasing each year.

Asked whether they attributed the number of visitors with disabilities to the level of accessibility of the national parks, one respondent agreed and argued that the number of day visitors to his national park was decreasing due to inaccessibility. The other park managers were of the opinion that more than one factor accounts for the visitor numbers.

5.6.4.2.4 Viability of the accessible tourism market

In South Africa, two of the park managers regarded the accessible tourism market as economically viable while one believed that the market is viable at national rather than individual park level, especially at parks in very remote areas. One manager bluntly stated that the disability market is not viable at all. A park manager in Zimbabwe believed that the accessible tourism market could be viable if promoted while the others said there is no market since most people with disabilities are poor. This finding concurs with the 'no market' misconception outlined by Mace (1991:4). Again, this shows that most of the park managers do not have a global perspective of the disability market.

5.6.4.2.5 Most common disability among patrons

The researcher sought to establish the type of disability that is dominant among persons who visit national parks. Mobility impairments were reported by all park managers as the most common type of disability in both South African and Zimbabwean national parks. This perhaps, explains the frequency of respondents with disabilities in this study where 121 or 65% of all respondents had mobility impairments.

5.6.4.2.6 Extent to which national parks are accessible in South Africa and Zimbabwe

Only one of the eight park managers admitted that their national park is not accessible at all. This national park is in Zimbabwe. The remainder believes that their national parks are fairly accessible. Interestingly, none said that their national park was universally accessible. From the researcher's personal observations, the definition of universal accessibility varies from one park manager to another. Some view a ramp on the pavement despite steps to the bedroom as universally accessible. The term 'fairly accessible' as used by most park managers is far from being applied properly and the researcher believes that the national parks are not accessible.

Of the eight national parks selected, only one (South African) had over 50% of the listed areas marked as accessible. The other South African parks had 31% (n=1) and 38% (n=2) of the listed areas accessible. One Zimbabwean national park scored 37%, followed by 25% and the other two had 13% each. The listed areas included all areas of the park from transport to restaurants and public areas. These figures show that South African National Parks are more accessible than those in Zimbabwe.

Asked what they have done to enhance universal accessibility in their national parks, all park managers in Zimbabwe said they have not done anything in this regard. They were concentrating more on wildlife conservation than anything else. However in South Africa, there have been a number of projects. One national park (Addo Elephant) manager said they had made great strides including building an interpretation centre, audio descriptive facilities (still on trial), and sound booths, among other things. Mountain Zebra National Park has been working to make roads, paths and viewing points more accessible. There are also plans to build more accessible accommodation units. The same is true for Kgadagali National Park where a maintenance plan is already in place.

5.6.4.2.7 Opinions of park managers on making parks universally accessible

The researcher wanted to get the views of park managers on making their parks universally accessible. All park managers in South Africa view universal accessibility as worthwhile. One said that there is no option but to make national parks universally accessible. This is both a humanitarian obligation and a constitutional right. Another respondent believes that the whole idea of making parks national is to make them accessible to all people without discrimination.

The last respondent argued from a business point of view and said that the more national parks are made accessible, the more visitors with disabilities they will attract.

Park managers in Zimbabwe had mixed feelings about the whole issue of universal accessibility. Of the three who think that it is a good idea to make national parks universally accessible, one argued that there is no demand for the product. Another manager said it is not worth the investment. He argued that it is very expensive to adopt the principles of universal accessibility, yet there is no guarantee of business. These views are also raised by Mace (1991:1), who refers to them, as 'no market' and 'it's expensive' misconceptions. Whether these are misconceptions or realities, one needs to study the economic arguments for accessible tourism (Chapter 2). One park manager in Zimbabwe hailed the idea of universal accessibility as an answer to accessibility problems that have been bedeviling PwDs but the fourth was of the opinion that the whole idea is a waste of resources and time.

Six of the eight park managers said that, given sufficient funds, they would make their national parks universally accessible. The remaining two said they would only work on accessibility issues after addressing "more pressing and core issues". The majority of the park managers (n=7) are of the view that they would prioritise people with mobility challenges if they were given enough funds while one said he would prioritise the hearing and visually impaired. While the seven argue that people with mobility disabilities should be prioritized because they constitute the majority of people with disabilities, the other manager feels that much attention has already been paid to the mobility impaired at the expense of those with other impairments.

5.6.4.2.8 Challenges faced in trying to make parks accessible and support needed

In order to successfully achieve universal accessibility, the major challenges need to be identified. All the park managers in Zimbabwe and South Africa lamented the lack of funds. While many would want to see their national parks become more accessible, funding remains a serious challenge. However, two park managers in Zimbabwe also argued that there is limited or no expertise in the discipline of universal accessibility; hence there is need for training. One respondent said that it is feared that there will not be sufficient demand for the accessible product; hence there is need for marketing support from stakeholders.

5.6.4.2.9 The future of national parks in terms of universal accessibility

The researcher asked the park managers where they think their parks would be in the next ten years in terms of universal accessibility. All the park managers in Zimbabwe were of the view that their future is dependent on the stance taken by headquarters on the issue. As parks, they have no plans relating to universal accessibility. In contrast, park managers in South Africa referred to their Park Management Plans, where universal accessibility is one of the key result areas. Accordingly all sounded positive and are likely to make significant strides in terms of enhancing access. According to one park manager, the park should have at least complied with minimum accessibility standards. Another manager said: "*we will be up there, and have it all"*.

5.7 SUMMARY OF FINDINGS

This section combines the results of the quantitative and qualitative studies. As the results are merged, the findings from the qualitative and quantitative studies are categorised on the basis of whether they were from the demand or supply side. It is out of this section that recommendations and a universal accessibility framework were developed.

5.7.1 Demand Side

The results of the questionnaire for PwDs and those of the panel discussions with representatives of disability organisations and parents of children with disabilities are reported collectively in this section.

5.7.1.1 Accessibility expectations of tourists with disabilities

This study revealed that PwDs have more expectations than is normally thought. The following expectations were considered extremely important by the majority (over 50%) of PwDs, while

some were offered as recommendations. Other expectations were captured from the panel discussions with representatives of disability organisations and parents of children with disabilities.

People with disabilities expressed that they expect transport (buses, coaches or vehicles) with low floors, proper seats designed for people with disabilities and safety in transit. Furthermore, game drive vehicles should be accessible to PwDs. They must have ramps for wheelchair access.

Reserved parking should be available at the national park and it should be labeled correctly. Access to the reception should be easy with ramps where necessary. The access path should be illuminated or have attention lines in contrasting colours in order to accommodate people with visual impairments. The main entrance door is expected to be very wide (more than 800 mm) in order to accommodate wheelchairs and baby prams. Steps and stair cases were condemned by almost all respondents, regardless of their disability.

People with disabilities expect park employees to view them as any other normal person. They do not want to be given special attention as if something is wrong.

Water based activities in national parks are expected to be accessible to all regardless of ability. Access ramps into swimming areas are expected to be available as well as designated safe swimming areas for PwDs. People with disabilities across the globe also expect hazard free walking areas, without suspended objects, furniture or anything that may affect smooth and safe movement.

Restrooms are expected to be easily accessible to people with all types of disabilities with smooth access and no level differences in the form of steps or stairs. The same is expected for guest bedrooms, restaurants and other public areas. In the bathrooms/shower rooms, roll in showers and shower seats should be made available to all, especially those using wheelchairs. In order to cater for visitors with visual impairments, respondents suggested that audio messages or notices be placed at all areas that require attention. For those with hearing challenges, it is expected that flashing lights be available to alert people in case of emergency. Doorbell lights should also be made available to alert the occupant of a knock at the door.

5.7.2 Supply side

5.7.2.1 Accessibility of National Parks in Zimbabwe

Based on the responses from the ZimParks headquarters, area park managers, and website and document analysis as well as the researcher's personal observations, the following conclusions were reached on the accessibility of national parks in Zimbabwe.

The Business Development Manager at the ZimParks Headquarters and the area managers of the selected parks conceded that their national parks are not universally accessible. However, they argued that they are 'moderately accessible' based on the fact that ramps are found at one point or another. Personal observations revealed that national parks in Zimbabwe are largely inaccessible. The researcher observed that there is no accessible transport to and at the national parks. ZimParks does not offer transport to its national parks, neither does it have its own game drive vehicles. Alternatively, visitors can access the national parks by means of tour operators' vehicles. Unfortunately, all the game drive vehicles at the parks visited had no facilities for tourists with disabilities, especially wheelchair users.

At the park entrance, there are no designated parking bays for people with disabilities, and the parking spaces available are too narrow for people using assistive devices. In almost all the parks, movement from the park to the reception is not easy especially for wheelchair users and those who use white sticks. There is a lack of paving, loose pebbles and, in some cases (Hwange & Victoria Falls National Parks) sandy surfaces make it very difficult for wheelchairs to move. There is no accessible path with tactile guides on each side to allow the visually impaired to get to the reception. At all four national parks, steps or a threshold at the doorway are the order of the day.

Other facilities that are not very accessible include the reception desk (too high), the restrooms, guest bedrooms and game and bird viewing platforms. The restrooms are not fitted with grab bars and the doors are too narrow for wheelchair users. An issue of most concern about the toilets is that the blair toilet system is used inside the park.

None of the bedrooms at the four national parks were constructed with PwDs in mind. There are steps everywhere, and switches and sockets are too high for most people with disabilities. Game/bird viewing platforms are built in such a way that they can only be accessed using a

ladder or steps. This excludes those who cannot climb (the aged, pregnant women, wheelchair users, and the blind).

There is no mention of PwDs or universal accessibility in the organisation's documents, neither is there anything on its website. When it comes to the national parks themselves, people with hearing and visual impairments are not considered at all. There are no interpretation centers and tactile and smell exhibits for people with hearing and visual impairments. Unlike in South Africa's Addo Elephant National Park where people with visual impairments can enjoy the wild by listening to sounds of the different animals in the park, there are no sound booths. There is no information whatsoever in braille, either as promotional material or for visitor information.

5.7.2.2 Accessibility of National Parks in South Africa

Based on document and website analysis, responses from SANParks headquarters and regional managers as well as expert opinion, the following can be concluded about the accessibility of national parks in South Africa:

It is important to note that South Africa has made significant progress in enhancing access to PwDs. However, in its 2013 Status Report on Universal Accessibility, SANParks acknowledges that much attention has been paid to the accessibility of people with mobility impairments, particularly wheelchair users. It is worth noting that all national parks in South Africa have accessibility information on their websites, some more detailed than others.

Despite the fact that universal accessibility standards have not yet been achieved, it is important to note that all of the selected national parks in South Africa have some level of accessibility. The extent of accessibility differs from one park to another. Addo Elephant National Park has the highest extent of accessibility with ramps in most public areas including the reception entrance, interpretation center, some lodges and ablution facilities. However the ramps are sometimes too steep or too long making it very difficult for people in wheelchairs to move. While most walkways are paved, in a few instances, loose gravel and sand may inhibit traction for motorized or wheeled assistive devices. According to the website, accommodation at Addo National Park is accessible although the number of accessible units is very small.

Addo National Park is one of the few national parks that offers game drives to visitors using its own vehicles. However, these vehicles are not very accessible to wheelchair users since mobility challenged persons have to be lifted into the vehicle. The park has an accessible parking lot which is clearly marked.

Game and bird watching hides at Addo National Park are quite accessible to people with mobility challenges. Wide, paved paths and gentle access ramps lead to the hides; however, some of the paths do not have tactile edges to guide people using white sticks. The hides have places designed for wheelchairs where users can clearly view the animals/birds without difficulty.

A unique feature of the Addo National Park is the presence of a long trail which cuts through thick bush. A walk through this trail allows visitors with disabilities (and the able-bodied) to enjoy the sights, sounds and smells of the park. This trail which is several hundred metres long is made of poly wood and is accessible from the accommodation units and the main complex via a tarred road making it very accessible to all. Furthermore, Addo Elephant National Park is the only one among the four national parks studied that has an interpretation centre. This accessible centre is equipped with a sound booth and tactile exhibits for the visually impaired and other visitors.

Marakele National Park is moderately accessible according to SANParks standards. The facilities at this park are mainly accessible to people with mobility challenges. While there is no designated parking space for guests with disabilities, the surface from the public parking to the reception area is brick paved, firm and even. This provides the required traction for wheelchairs. However, the path to the reception does not have contrast colours and is not illuminated to assist visitors with impaired vision.

The restrooms at Marakele National Park are a little difficult to access if one is using a wheelchair or other assistive devices simply because the ramps to the restroom doors do not have a landing platform. The ramp ends right at the entrance and when one tries to open the restroom door, the wheelchair rolls backwards. However inside the restrooms/toilets there are grab bars, and accessible single lever wash basins with push taps.

Currently the bird watching hides and picnic sites at Marakele National Park are not very accessible to people with disabilities. The paths that lead to the hides are a little thorny and there are steps into the hides. The picnic sites have tables with fixed concrete benches. The benches make it impossible for wheelchair users to access the table. Furthermore, the paths

leading to the toilets in the picnic areas are sandy and there are steps at the toilet entrance. This automatically excludes visitors who are not able to climb steps.

Accommodation at Marakele National Park is quite limited with only 10 tents, one of which is accessible to PwDs. While the kitchen of this tented unit is accessible, the door to the bedroom is spring loaded, making it difficult for people without limbs as well as those in wheelchairs to open it.

Kgalagadi National Park has 11 adaptable accommodation units. However, it should be noted that the use of the word 'adaptable' implies that the units were not designed with PwDs in mind, but can be manipulated to accommodate such when the need arises (Mace, 1991:3). Accessible campsite ablution facilities and public toilets are only available at some of the camps at Kgalagadi.

As for Mountain Zebra National Park, access ramps are available at reception, and the conference room, restaurant and shop. The walkways are also paved. Accessible unisex toilets are available and two family cottages are adaptable. This is the full extent of accessibility at this park.

5.7.2.3 Opinions of national park management on universal accessibility

The views and opinions of parks authorities and regional/area park managers in both South Africa and Zimbabwe revealed that universal accessibility as a principle is very welcome. Almost everyone agreed that it is important and worthwhile to make national parks universally accessible. The only difference was the motivation for universal accessibility. On the Zimbabwean side, it seems that the economic significance of the accessible tourism market has not yet been appreciated; hence all the managers are of the view that accessibility is a legal and humanitarian obligation rather than a business opportunity. ZimParks managers said that, given sufficient resources, they would not invest in universal accessibility but concentrate on wildlife conservation and other 'priority areas'. This demonstrates the need for education and enlightenment on the concept of universal accessibility and its economic significance. If no policy on universal accessibility is developed for ZimParks, the parks will remain inaccessible to PwDs even a decade on.

In contrast, the majority of SANParks mangers believe that universal accessibility is a business opportunity over and above being a legal imperative. SANParks managers said that, given

sufficient resources, they would make their parks more accessible and most of them projected that in ten years' time, their national parks would have met the minimum standards for universal accessibility.

5.8 CONCLUSION

It is one thing to understand the concept of universal accessibility and another to implement it, but the two are seriously intertwined. One cannot implement what one does not know; thus, it is important for South Africa and Zimbabwe to invest in human capital development in the area of universal accessibility. The responses in this study are a real reflection that universal accessibility is still in its infancy both as a field of study and in practice. What is considered universally accessible in most cases is far from the essence of the concept. The development of a universal accessibility framework will enlighten many on what universal accessibility really entails.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The concept of universal accessibility arose in response to the fact the most facilities are only accessible to able-bodied people. This excludes minority groups such as people with permanent impairments, the aged, pregnant women and the sick (temporary impairments) (Fradj, 2014:14). People with disabilities (PwDs) are the largest minority group affected by access issues (Story, Mueller & Mace, 2011; Darcy, 2006). While pressure from the disability rights movement motivated the move towards universal accessibility, this does not exclude other minority groups.

To a large extent, the tourism sector is still not universally accessible (Darcy, 2000, 2004, 2006; Buhalis & Darcy, 2011). Nature-based tourism, by its very nature has been accused of not being considerate to PwDs (Zeller, 2007; Jaquette, 2005; Lais, 1992). Most natural areas, including national parks, exclude PwDs. Universal accessibility requires that everyone, regardless of their ability, has easy access to all facilities (including national parks) without any need for special adaptation or specialized design (Cornell *et al*., 2008:2-10; Mace *et al.,* 1991).

It is against this background that this study aimed to develop a universal accessibility framework for national parks in South Africa and Zimbabwe. Having reviewed the literature, explained the study's methodology and presented the empirical findings, this chapter draws conclusions and makes recommendations on universal accessibility in national parks in South Africa and Zimbabwe.

Apart from achieving the research goal of developing a universal accessibility framework for national parks in South Africa and Zimbabwe, this study also achieved the four stated objectives detailed in Chapter 1:

- The first objective was to analyse literature concerning universal accessibility in tourism with specific reference to research in National parks or nature based products. This objective was achieved in chapters 2 and 3 where different publications on universal

accessibility, models of disability, nature-based tourism and national parks were interrogated.

- The second objective was to establish the extent to which national parks in South Africa and Zimbabwe are universally accessible. Using document and website analysis, responses from park management and personal observation, this objective was achieved. This was achieved in chapter four.

- The third objective was to collect data on the accessibility expectations of tourists with disabilities and the views of park management on the universal accessibility of South Africa and Zimbabwe's national parks. This objective was achieved in chapter four by adopting both qualitative and quantitative research approaches. On the quantitative side, a 10-page electronically generated questionnaire was used to establish PwDs' accessibility expectations. On the qualitative side, panel discussions were conducted with representatives from disability organisations and parents of children with disabilities. Interviews were also conducted with SANParks and ZimParks management as well as regional/area managers to solicit their opinions on accessibility issues.

- The fourth objective was to draw conclusions and make recommendations on universal accessibility and to develop a framework that could be used to enhance accessibility in national parks. The conclusions are detailed in section 6.4 while the recommendations are outlined in section 6.5.

6.2 PERSONAL JOURNEY

This journey started in November 2011 when the researcher came across a softbound copy of a book titled *Accessible Tourism: concepts and Issues*, co-edited by Buhalis and Darcy (2011). After a few pages, questions without answers arose. These included: What is really the issue here, are disabled people really a market? Is there any published work on disabilities and tourism in Africa? Do PwDs have a propensity to travel for tourism in Southern Africa, particularly in Zimbabwe? Does the country's tourism sector have anything to offer PwDs?

A review of the existing literature did not provide adequate answers to most of these questions. The researcher kept searching for material to do with PwDs across the globe and made many discoveries. He learnt that this field of study was in its infancy but most importantly, he became

emotionally attached to disability issues. One study that really draw the researcher's attention was Choruma's (2010) *The forgotten Tribe*. The author referred to PwDs as the forgotten tribe and pointed out that the Zimbabwean government gave very low priority, if any, to PwDs.

In 2012, the researcher decided to embark on his PhD and there was no question as to the field of study - it had to do with tourism and PwDs. After the application was accepted by the North-West University - Potchefstroom Campus, the researcher battled for a while to find the exact topic to pursue. It started as '*An exploration of disability tourism in Zimbabwe; unearthing the hidden market',* where the researcher thought of breaking the ice in terms of disability tourism studies in Zimbabwe. After consultations with study leaders, the researcher changed the topic to '*Nature-based tourism for people with disabilities: looking through the customer's lenses.'* Here a nature-based tourism aspect was added, but it was not enough. Further discussions with study leaders suggested that the best option would be to look at the subject from a policy point of view and to include South Africa and Zimbabwe in order to make the study more representative. The research title was then changed to *'Evaluation policy of Universal accessibility of Parks in Southern Africa,* which was finally framed as '*The development of a universal accessibility framework for national parks in South Africa and Zimbabwe',* the registered title.

After over a year of preparing and finalising the research proposal, the researcher went on to review the literature. At this time, the researcher wrote a research article titled, '*Is there room in the inn? Towards incorporating people with disabilities in tourism planning.'* This examined the extent to which the tourism sector in Zimbabwe, from policy formulation to practice, has incorporated disability issues. However, it focused on tourism operators in the country's prime tourist destination, Victoria Falls. The article has since been accepted for publication in the *Disability Review Journal* (a refereed journal).

One notable milestone in this PhD study is the fact that it was accepted for presentation in its uncompleted state (as work in progress) at the 7th World Conference on Graduate Research in Tourism, Hospitality and Leisure in Istanbul, Turkey (3-8 June 2014) where it won the outstanding PhD Dissertation Award. By then, data collection was in progress and this award gave the researcher more strength to complete the study. Data collection was challenging given that the targeted respondents were hard to reach. However a mixed methods approach was used to ensure that reliable and representative data was collected.

Finally, the researcher feels greatly honoured to make a contribution, not only to knowledge but also to the quality of life of persons with temporary and permanent impairments. It would bring him great joy to see national parks become universally accessible.

6.3 UNIQUE CONTRIBUTION

This study is expected to contribute extensively to the **existing body of knowledge in the form of literature, methodology and management practice**. As noted in the literature review, there is paucity of research on universal accessibility and nature-based tourism in Africa despite the fact that nature is Africa's primary tourist draw card. This study locates Southern Africa in the literature on universal accessibility by revealing the accessibility status of national parks in South Africa and Zimbabwe. Through the development of a universal accessibility framework, the study also offers guidelines and standards on the universal accessibility of national parks in these two countries. A further contribution to the literature is that this study documented universal accessibility in an African context from both the demand and supply side.

Secondly, this study contributed to methodology by employing a two-pronged approach that investigated both the demand side and the supply side in order to formulate a mutually acceptable universal accessibility framework. This is opposed to the common method of using expert opinion alone to establish accessibility standards. It also made a contribution by adopting a mixed methods approach to collect and analyse research data. Both qualitative and quantitative methods were used, yielding more detailed and reliable results. Another unique contribution is the use of a cross-dimensional approach. Instead of investigating just one disability dimension, this study considered mobility, hearing and visually impaired people and sought to ensure that in the future, more people with disabilities can enjoy holiday travel to national parks.

The study also made a contribution by focusing on two countries at different stages of economic development (South Africa and Zimbabwe); the results were integrated to provide a comprehensive and representative framework for all national parks in Southern Africa.

The fourth and most important contribution is that this study developed the first ever, research-based universal accessibility framework that offers specific guidelines on product development in national parks (Figure 6.1). No previous study has combined supply and demand side

opinions to build a specific framework for different types of impairments. The framework will inform policy decisions on universal accessibility in national parks and the tourism industry in general. The following section discusses the framework.

6.3.1 The universal accessibility framework for National Parks

Based on the findings of this study, a universal accessibility framework was developed for national parks in South Africa and Zimbabwe. It is important to note that this framework was developed using the principles of universal design which are premised on the fact that facilities should be usable by the majority (if not all) without any need for specialised design (Centre for Universal Design, 1997; Mace *et al.,* 1991). Therefore all the accessibility expectations identified and recommended in this study were integrated in the framework from a universal design point of view. The following is a recap of the principles of universal design:

Equitable use - The design must be useful and marketable to people with diverse abilities. In other words, provide the same use for all users: identical whenever possible; equivalent when not. Avoid segregating or stigmatizing any users and ensure the protection of the privacy, security, and safety of all users. The design should be appealing to all users.

Flexibility in use - The design accommodates a wide range of individual preferences and abilities. Offer choice in methods of use and accommodate right- or left-handed access and use. Facilitate the user's accuracy and precision and provide adaptability to the user's pace.

Simple and intuitive use - Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration levels. Eliminate unnecessary complexity; be consistent with user expectations and intuition. Accommodate a wide range of literacy and language skills and arrange information consistent with its importance. Provide effective prompting and feedback during and after task completion.

Perceptible Information - The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. In this regard:

- Use different modes (pictorial, verbal, tactile) for presentation of essential information.
- Provide adequate contrast between essential information and its surroundings.
- Maximize the 'legibility' of essential information.

- ❖ Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- ❖ Ensure compatibility with a variety of techniques or devices used by people with sensory limitations.

Tolerance for error - The design minimizes hazards and the adverse consequences of accidental or unintended actions. In order to achieve this:

- ❖ Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
- ❖ Provide warnings of hazards and errors.
- ❖ Provide fail safe features.
- ❖ Discourage unconscious action in tasks that require vigilance.

Low physical effort - The design can be used efficiently and comfortably with minimal fatigue. Make sure you allow the user to maintain a neutral body position and use reasonable operating force. Minimize repetitive actions as well as sustained physical effort.

Size and space for approach and use - Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility. Therefore:

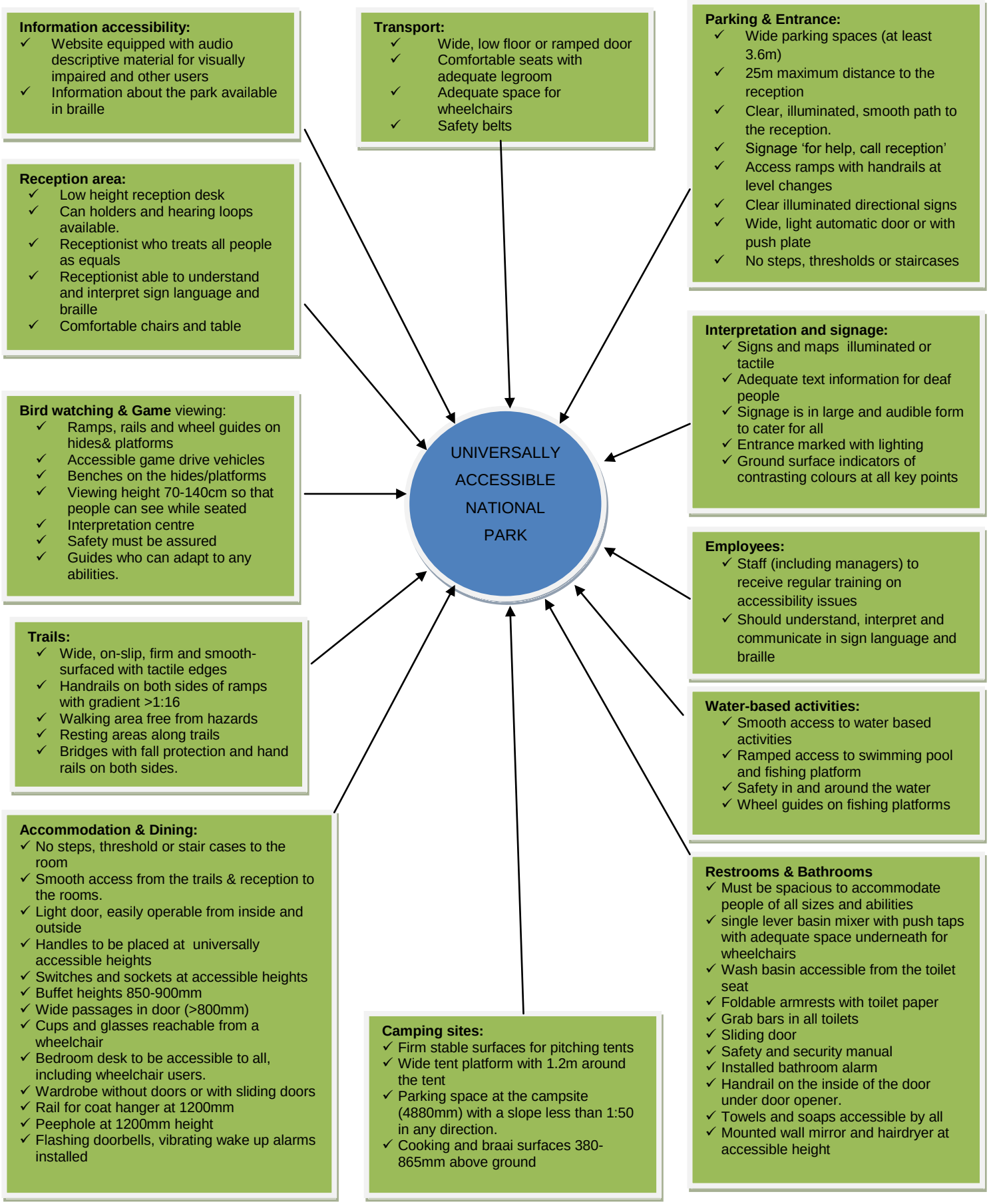
- ❖ Provide a clear line of sight to important elements for any seated or standing user.
- ❖ Make reach to all components comfortable for any seated or standing user.
- ❖ Accommodate variations in hand and grip sizes.
- ❖ Provide adequate space for the use of assistive devices or personal assistance.

The 11 factors identified by the three factor analyses for accessibility expectation were used as the main areas of the park. Three factors were established from factor analysis 1, while five and three factors were identified from factor analysis 2 and 3, respectively (see chapter 5). The factors are ***transport, parking and entrance, reception, game/bird viewing, swimming and fishing, accommodation and dining, restrooms, trails, information accessibility, interpretation*** **and** ***camping.*** Employees were added to the 11 factors since they emerged as a very important element affecting the experiences of visitors with disabilities in national parks. Only those items from the questionnaire that were considered to be extremely important were used to develop this framework. At least 50% of the respondents had to have identified them as extremely important. However for visual and hearing impairments, items with lower percentages were used in this framework based on the fact that there were fewer respondents with such

impairments than their counterparts with mobility impairments. Suggestions and recommendations from PwDs and representatives of disability organisations as well as parents of children with disabilities were also considered in this framework.

Figure 6.1 below presents a universal accessibility framework for national parks in South Africa and Zimbabwe (although it can also be applied in other African countries). The framework is based entirely on the findings of the survey; interviews and panel discussions conducted and is a true reflection of the needs and expectations of PwDs.

Figure 6. 1: Universal Accessibility Framework for National Parks (Authors own compilation)



The framework (Figure 6.1) ensures that facilities can be easily used by anyone regardless of ability. There are no specific areas for specific people; all areas within the park must accommodate everyone regardless of whether or not they have a disability. For example, an access ramp is not only good for wheelchair users; it is useful for old people, the blind, pregnant women, tired people and the sick who cannot use steps. It is also useful to people pushing trolleys. The same applies to wide, automatic or sliding doors. Apart from being useful to people in wheelchairs; they are also good for able-bodied individuals and people carrying luggage. All facilities in a universally accessible national park are useful to every individual.

This framework is different from any other frameworks in the sense that it covers the whole national park, not just parts of the park. For example, the Parks and Benefits Master Guide focused on park activities and not the accommodation and dining areas. Furthermore, these guidelines were designed for recreational parks in the Baltic Sea Region, not wildlife reserves. The above framework was designed for national parks in Africa which are wildlife habitats, including predators. Unlike the Scandic accessibility standard, this framework covers more than just accommodation. While the Scandic standard was specifically designed for hotels, this framework is designed for national parks.

6.4 CONCLUSIONS

It is critical to persevere in the ongoing endavour to make certain that tourist destinations, products and services are accessible to all people irrespective of their physical limitations or disabilities. Based on the study's research objectives and findings, the following conclusions were made.

6.4.1 Conclusions from the literature review

The first objective was to review the literature on universal accessibility in tourism. The following conclusions arose from this objective:

6.4.1.1 Conclusions from Chapter 2

- Disability is different from impairment. While impairment is a lack in a person's body, a disability is a social construct (c.f.2.2.1).
- It is society that creates barriers that disable people with impairments. If an enabling environment is presented, all people are able to participate in all activities without discrimination. It is precisely such an enabling environment that the framework in Figure 6.1 seeks to achieve. The social model was therefore adopted for this study (c.f.2.2.3).
- While there are many dimensions of disabilities, mobility and sensory (hearing and visual) impairments are the most easily identifiable. They are also the ones that create the greatest need for accessibility (c.f.2.3.1).
- The tourism industry has focused on accessible design rather than universal accessibility. There is need for a paradigm shift towards universal design (c.f.2.2.4).
- Many organisations have shunned universal accessibility because they are afraid of the costs involved as well as the viability of the disability market (c.f. 2.2.4).
- Universally accessible features that are good for PwDs are also good for other people (c.f.2.2.5).
- The chapter also explored the economic significance of the disability market and concluded that PwDs constitute an economically viable global tourist market. They also stay longer at a destination and spend a bit more than their able-bodied counterparts. This implies that making national parks universally accessible is not only a humanitarian or legal obligation, but a business opportunity (c.f.2.6).
- There is a direct positive correlation between ageing and disability. The older a person grows, the more likely they are to develop some disability (c.f.2.6). As the world's aged population increases, there is a concomitant increase in the number of PwDs.
- There is no specific legislation in place for the enforcement of universal accessibility in tourism in Zimbabwe. The existing laws are too general and are not enforced. In South Africa, apart from the Universal Accessibility in Tourism Declaration (which is not enforced), no other official tourism specific legislation exists for universal accessibility (c.f.2.7).

6.4.1.2 Conclusions from Chapter 3

- Nature-based tourism is primarily concerned with the direct enjoyment of a relatively undisturbed natural environment with a stay of at least one night at a destination (c.f.3.2).

- Nature-based tourism is the fastest growing tourism segment and is contributing significantly to national economies. It is a tourist draw card for many countries (c.f.3.3). It is therefore worth investing in nature-based tourism.

- If not properly managed, nature-based tourism can damage the environment on which it is based. The most common negative impacts of nature-based tourism include pollution, disturbing wildlife behaviour, vandalism and degradation of the natural environment (c.f.3.10.1).

- The most common nature-based tourism activities include bird watching, game drives, fishing, swimming, photography, mountain climbing, scuba diving and trekking (c.f.3.4).

- The literature review also concluded that PwDs have similar motivations for visiting natural areas as the able-bodied. These include escaping daily routine, family togetherness and love of adventure, among other reasons (c.f.3.5). As long as these motivations exist, PwDs will continue to visit natural areas.

- Nature-based tourists stay longer at their destination but their average expenditure is similar to that of other tourists (c.f.3.5). The fact that nature based-tourists stay longer makes their total expenditure very high, making this an economically viable sector (c.f.3.7).

- Worldwide, tourism played a significant role in the development of national parks and it remains a pillar of the financial sustainability of these parks especially in Southern Africa (c.f.3.9). It is therefore sustainable to continue investing in park tourism.

- Impairments do not make PwDs less adventurous. In fact, PwDs have a strong desire to visit natural areas and would like to participate in even more adventurous activities than the so-called able-bodied (c.f.3.10).

- Apart from physical barriers, PwDs also confront attitudinal and communication challenges when they visit national parks. Most employees in national parks lack

training on disability issues and this affects their attitudes towards PwDs. Furthermore, basic information is not available in languages that can be understood by PwDs, particularly the hearing and visually impaired (c.f.3.11).

- ❖ National parks in South Africa are accessible to a limited extent. The few available accessible facilities mainly cater for people with mobility impairments, neglecting those with sensory and cognitive impairments (c.f.3.12). There is room for improved accessibility in South African national parks.

- ❖ Generally, it was concluded that there is a paucity of literature on universal accessibility, especially as it relates to nature-based tourism. There is no literature at all on this important subject in relation to Zimbabwe. Worldwide, no research-based universal accessibility guidelines are available for national parks; this was the impetus for this study (c.f.3.14).

6.4.2 Conclusions from the empirical research

The empirical research for this study included a survey of PwDs' accessibility expectations, interviews with park management, and panel discussions with representatives of disability organisations and parents of children with disabilities. From the empirical research, the following conclusions were made:

- ❖ Globally, PwDs have a great desire for accessible national parks. This is reflected in the fact that the survey respondents came from all parts of the world although the highest number were from South Africa, Zimbabwe, the UK, the USA and Australia (c.f.5.2.1).

- ❖ Most of the PwDs who participated in this study were married, employed and highly educated and the majority had mobility impairments (c.f.5.2.2). It was therefore concluded that disability does not necessarily prevent one from getting married, receiving education and gaining decent employment.

- ❖ People with disabilities prefer to visit national parks rather than other tourist attractions. They spend more time at the destination but their average expenditure per day is low. The majority of PwDs prefer cheaper transport and accommodation (c.f.5.2.2).

- The motivations for visiting national parks are the same for PwDs as those of able-bodied people (c.f.5.2.3). However people with hearing impairments seek more adventure and enrichment than those with mobility and visual impairments (c.f.5.4.2).

- Ignorant staff is the most common challenge that PwDs confront when they visit national parks. Other challenges include lack of access ramps as well as inaccessible transport to and in the park (c.f.5.2.4).

6.4.2.1 Accessibility expectations of persons with disabilities

- The study concluded that, to a greater degree, the expectations of the three disability dimensions under study (mobility, hearing and visual) are almost the same, except for the following cases where some disability types value some accessible facilities more than others (c.f.5.4.1).

- The mobility impaired were more worried about transport and parking than people with other impairments. They were also more worried about the accessibility of bird-watching and game viewing as well as accommodation and dining than were people with hearing and visual impairments (c.f.5.4.1).

- People with hearing impairments placed much higher value on the accessibility of the reception area than those with mobility and visual impairments. It was interesting to note that people with visual impairments did not regard accessible restrooms as very important (c.f.5.4.4).

- Common among PwDs is the fact that they all do not want an environment that is characterised by steps or staircases. Despite their disabilities, people generally dislike putting unnecessary effort to climb up steps when this can be avoided (c.f.5.2.5).

- PwDs also attach much value to how they are treated when they visit national parks. Being treated like any other normal person is more important than other accessibility concerns. In other words, once a person with a disability feels respected, other accessibility issues can be better addressed (c.f.5.2.5).

- PwDs also require wide doorways, and accessible transport to and in the park, appropriate signage and accessible restrooms, among other things (c.f.5.2.5). What benefits one dimension of disability, benefits other dimensions as well.

- While all areas of the park should be universally accessible, the study concluded that transport is the major factor that influences PwDs to visit national parks (c.f.5.2.5).

6.4.2.2 Accessibility levels of National Parks in South Africa and Zimbabwe

Based on the interviews with national parks officials, personal observations, and document as well as website analysis, the following conclusions were made:

- National parks in South Africa are more accessible than those in Zimbabwe although none of the eight national parks under study met the requirements of universal accessibility. National parks in Zimbabwe are, to a large extent, not accessible to PwDs, while those in South Africa are mainly accessible to people with mobility disabilities, particularly wheelchair users (c.f.5.6.4). Very little has been done to accommodate people with other disability dimensions. A closer examination of the SANParks website shows that when it comes to visual impairments, only guidelines for the use of guide dogs are given. Apart from translating promotional brochures (for the Northern region) into braille, nothing else was done. However, it is encouraging to note that the parks authorities are open to views and suggestions on how to make South African national parks accessible to people with visual impairments. This study sought to make a contribution in this regard.

- SANParks also acknowledges and appreciates the existence of tourists with hearing challenges although very little has been done to accommodate them. According to the SANParks website, some staff members have been trained in sign language. However, this was not confirmed by park regional park managers, who admitted that their staff members have not been exposed to such trainings. In fact, the managers want their employees to be trained. Again, more insights and suggestions are being sought in this area.

- It was further concluded that the two national parks authorities (SANParks and ZimParks) do not have universal accessibility policies, although SANParks has a draft universal accessibility strategy and protocol. However, the implementation of the strategy is not uniform across the different national parks in South Africa as reflected by the different levels of accessibility at these parks (c.f.5.6.4).

- It was also concluded that the absence of a universal accessibility policy, especially in Zimbabwe, has resulted in the current state of accessibility in the country's national parks. Therefore, there is a need for a universal accessibility framework for national parks (c.f.5.6.4).

6.4.2.3 Management opinions on making National Parks universally accessible

From the interviews with parks headquarters of the two national park authorities as well as the area/regional managers, the following conclusion were made:

- Parks authorities in both countries would like to make their national parks universally accessible despite the fact that the motivations for accessibility are different (c.f. 5.6.2).

- SANParks views universal accessibility as imperative and as both a business opportunity and a humanitarian obligation (c.f. 5.6.2).

- ZimParks managers view universal accessibility as a legal obligation. They do not believe that there is a business side to universal accessibility (c.f. 5.6.2).

- Given sufficient funds, SANParks would invest in accessibility while ZimParks would not give preference to universal accessibility issues. There is therefore a need for education on the economic significance of the disability market. Unless a paradigm shift takes place, the future of ZimParks is bleak while that of SANParks is vey bright in terms of universal accessibility (c.f. 5.6.2).

- Both countries view mobility impairments as their first priority if they are to improve accessibility. However, SANParks would also consider other impairments.

- Lack of funding is the major challenge that is hidering accessibility in both SANParks and ZimParks. However for ZimParks, expertise and motivation are also contributing to the poor state of accessibility in national parks (c.f. 5.6.4).

6.5 RECOMMENDATIONS

Based on the research findings and the literature review, the following recommendations are made:

- All national parks should train their staff to be courteous when dealing with PwDs. This comes against the backdrop of park employees failing to treat PwDs like any other normal people. This could be the result of a lack of knowledge of tourists with disabilities. The training should be done in partnership with disability organisations as well as training institutions. For example, in South Africa, SANParks could work with the National Council for Persons with Physical Disabilities (NCPPD) and the Association for Persons with Disabilities (APD) together with the North-West University, Department of Tourism. In Zimbabwe, ZimParks could join hands with the National Council of Disabled People of Zimbabwe (NCDPZ) and Zimbabwe Association of the Visually Handicapped (ZAVH) together with Midlands State University - Tourism and Hospitality Department. This would produce the best employees in national parks.

- Park management should also be educated on the economic significance of the disability market to tourism in their countries. They should approach this market from a global perspective. This recommendation is based on the finding that park management in Zimbabwe has not realised the potential of the disability market. This is probably due to the low economic status of PwDs in Zimbabwe, which is not a reflection of PwDs globally. With the help of tourism researchers in tertiary institutions, workshops can be held periodically to update park management on current trends in tourism. This would give managers a global perspective of nature-based tourism.

- SANParks and Zimbabwe Parks and Wildlife Management Authority should urgently formulate universal accessibility policies and closely monitor their implementation. This is the only way to ensure that national parks in these countries achieve at least the minimum accessibility standards as per universal design specifications. Consultations

should be held with major stakeholders (e.g., disability organisations, tourism authorities, educational institutions, and the legal authorities) and a policy should be developed. Implementation of the policy should be monitored using the guidelines proposed in this study (see 6.3).

- National parks should work closely with tour operators and travel agencies to design tour packages specifically aimed at PwDs. A discount can be offered on such a package to stimulate demand. Incentives can be offered to tourists with disabilities to encourage them to continue to visit national parks. These could include a free game drive for every tourist with a disability who stays more than one night.

- In order to stimulate domestic tourism among PwDs, parks authorities (in collaboration with tour operators) should conduct awareness campaigns targeted at disability organisations so that they encourage their members to participate in nature-based tourism. Print and electronic media could also be used to promote nature-based tourism among PwDs in both South Africa and Zimbabwe.

- A statutory instrument should be put in place to ensure that all tour operators make their vehicles accessible to PwDs. Since it might be expensive to make their whole fleet universally accessible, a certain number of vehicles should be accessible before the tour operator is registered and allowed to operate. Existing tour operators must modify their vehicles to accommodate PwDs.

- Boarding platforms with ramped access should be constructed in parks to allow wheelchair users and people with other mobility challenges to embark and disembark the vehicle. Alternatively, movable platforms can be used and these should be carried throughout game drives and other activities that require the use of a vehicle.

- ZimParks should ensure that its website is updated with information on accessibility. Currently, there is not a single sentence on universal accessibility. The little that is currently available as well as the plans regarding accessibility must be highlighted. The website should also be interactive and offer a forum for PwDs to share their experiences in different national parks.

- Parks authorities in both South Africa and Zimbabwe should ensure that reservations for PwDs are guaranteed or there should be an appropriate release date in order to avoid the situation where people find their 'reserved' room occupied. In fact, SANParks' Roomseeker and ZimParks reservation systems must make provisions for PwDs to book units that are suitable for them. This is against the background where PwDs sometimes find the rooms they booked occupied by the able-bodied. Reservation staff must also exercise high levels of professionalism in this regard.

- Due to financial resource constraints, it might not be possible for national parks in South Africa and Zimbabwe to immediately make all their facilities universally accessible. Therefore, it is recommended that parks prioritise areas of access and adopt a stepped approach (from most to least urgent) to implementing universal accessibility standards. This would enable these national parks to accomplish a certain degree of accessibility by a stipulated date.

- Since South African National Parks are more accessible than Zimbabwean ones, a bilateral agreement could be signed between SANParks and ZimParks to enable ZimParks to learn from SANParks' experience and expertise. Funding can be sought from international disability organisations like ENAT to facilitate such developments.
  This mutually beneficial arrangement could also promote multi-destination tours where tourists to Zimbabwe would visit national parks in South Africa (and vice versa).

- Since parks authorities complain of lack of funding, they could consider Public Private Partnership (PPP) agreements to secure resources for facility development. These could take the form of Build-Operate-Transfer (BOT) where private operators build the required facilities (e.g., chalets) as per universal accessibility requirements, operate them for a specified number of years and then transfer the facility to the national parks authorities.

6.6 LIMITATIONS OF THE STUDY

Like any other research, his study had its own limitations;

- The study used the case of South Africa and Zimbabwe to mirror southern Africa as a region. While these two countries may provide a picture of region, the study may not be

generalised without reservations given the fact some countries in southern Africa have unique political, economic and socio-cultural situations.

- There was an imbalance on the representation of the different dimensions of disabilities with the majority (65%) of respondents being people with mobility impairments. This may have an effect on the conclusions.
- The targeted population for this study was hard to find and this had an impact on the total number of respondents.

6.7 RECOMMENDATIONS FOR FUTURE RESEARCH

This study sought to determine PwDs' accessibility expectations as well as the opinions of parks management in order to formulate a universal accessibility framework for national parks in South Africa and Zimbabwe. While the study culminated in the development of a universal accessibility framework for national parks, the following questions remain unanswered:

i. Apart from national parks, how do other tourism sectors fare in terms of universal accessibility?
ii. How applicable is this universal accessibility framework to other countries in Africa and other regions across the globe?
iii. How can African countries stimulate domestic nature-based tourism for PwDs?
iv. What are the specific personal needs of PwDs?
v. Are there gender disparities in the travelling patterns of PwDs?
vi. Are there cultural disparities in the travelling patterns of PwDs?

Universal accessibility in tourism is still in its infancy both as a field of study and in practice. This study used a mixed methods, cross dimensional approach to determine PwDs' accessibility expectations as well as the opinions of national parks authorities in South Africa and Zimbabwe in order to develop a universal accessibility framework for national parks. While such an approach has never before been adopted in the field of tourism, it should not be an end in itself. More work is required to alleviate the plight of PwDs, especially in tourism. If the proposed framework is fully implemented, South Africa and Zimbabwe could reap significant economic benefits from the disability market. Other countries could adopt and build onto the framework for their own tourism good.

BIBLIOGRAPHY

Abeyraine, R.I.R. 1995. Proposals and guidelines for the carriage of elderly and disabled persons by air. *Journal of travel research*, 33(3):52-59.

Aitchison, C. 2003. From leisure and disability to disability and leisure: developing data definitions and discourses. *Disability and society*, 18(7):955-969.

Alkon, A. 2008. Paradise or pavement: the social constructions of the environment in two urban farmers' markets and their implications for environmental justice and sustainability. *Local Environment: the international journal of justice and sustainability,* 13(3):271-289.

American Foundation for the Blind. 2012. Resources for employment statistics. http://www.afb.org/info/blindness-statistics/adults/resources-for-employment-statistics/235. Date of access: 12 November 2013.

Amundson, S.A., Myers, T.G., Scudiero, D. & Kitada, S. 2000. An informatics approach identifying markers of chemosensitivity in human. *Cancer research,* 60(21):6101-6110.

Anderson, L., Schleien, S.J., McAvoy, L., Lais, G. & Seligmann, D. 1997. Creating positive change through an integrated outdoor adventure program. *Therapeutic recreation journal*, 21(4):214-229.

APEC. 2013. APEC voices of the future: Bali Declaration: resilient Asia-Pacific, Engine of Global Growth, APEC CEO Summit, Nusa Dua, Bali, Indonesia, 2-8 October 2013.

Atkinson, D. 2004. Research and empowerment: involving people with learning difficulties in oral and life history research. *Disability & society,* 19(7):961-702.

Atkinson, R. & Flint, J. 2001. Accessing hidden and hard-to-reach populations: snowball research strategies. http://sru.soc.surrey.ac.uk/SRU33.pdf Date of access: 17 November 2013.

Atkinson, R. & Flint, J. 2001. Social research update: accessing hidden and hard-to reach populations. Surrey: University of Surrey.

Australian Bureau of Statistics. 2004. Survey of disability: disability, ageing and careers: summary of findings (cat. 4430.0). Canberra: Australian Bureau of Statistics.

Australian Hotels Association. 1998. Catering for guests with disabilities: survey of AHA members. Canberra: Australian Hotels Association.

Australian Tourist Commission. 1993. Fact sheet: Travel in Australia for people with disabilities. Canberra: Australian Tourist Commission.

Australian Tourist Commission. 1995. Fact sheet: Travel in Australia for people with disabilities. Canberra: Australian Tourist Commission.

Australian Tourist Commission. 1999. Facts for the visitor: Disabled visitors. Canberra: Australian Tourist Commission.

Bach, S. 2003. International migration of health workers: labour and social issues. Geneva: International Labour Office.

Baker, M.C. 2001. The atoms of language: the mind's hidden rules of grammar. New York: Basic Books.

Balmford, A., Beresford, J., Green, J., Naidoo, R., Walpole, M. & Manica, A. 2009. A global perspective on trends in nature-based tourism. *PLoS biology*, 7(6):100-114.

Barnes, C. & Mercer, G. 2003. Disability policy. Cambridge: Polity Press.

Barnes, C., Mercer, G. & Shakespear, T. 1999. Exploring disability: a sociological introduction. Malden, Mass.: Polity Press.

Bashar, A.A.M. & Abelnaser, O. 2011. An investigation into motivational factors that influenced foreign tourists' to Jordan: push and pull factors. *Journal of environmental management and tourism,* 1(3):16-23.

Bell, S., Simpson, S., Tyrväinen, L., Sievänen, T. & Pröbstl, U., *eds*. 2008. European forest recreation and tourism: a handbook. London: Taylor & Francis.

Bi, Y.H., Card, J.A. & Cole, S.T. 2007. Accessibility and attitudinal barriers encountered by Chinese travellers with physical disabilities. *International journal of tourism research,* 9(3):205-216.

Boo, E. 1990. Ecotourism: the potentials and pitfalls. Washington, D.C.: World Wildlife Fund.

Borst, B. 1990. Ecotourism: environment friendly international travel. *International herald tribune*: 3-4.

Boyne, D. 2005. Room set-up in Pizam, A., *ed*. International encyclopedia of hospitality. Amsterdam: Elsevier. p. 565-566.

Brackertz, N. 2007. Who is hard to reach and why? Hawthorn: Swinburne University of Technology. Institute for Social Research.

Brackertz, N., Zwart, I., Meredyth, D. & Ralston, L. 2005. Community consultation and the 'hard to reach': concepts and practice. Victorian Local Government Association.

Bricker, J. 1995. Wheelchair accessibility in wilderness areas: the nexus between the ADA and the Wilderness Act. *Environmental l.a.w.,* 25:1243.

British Columbia. Ministry of Environment, *et al.* 1996. Current and future economic benefits of British Columbia Parks. Report for the British Columbia Ministry of Environment, Lands and Parks. Victoria, BC: The Ministry.

Brockelman, W. 1988. Nature conservation: Thailand natural resources profile. Singapore: Oxford University Press.

Brown, K. 1998. The political ecology of biodiversity, conservation and development in Nepal's Terai: confused meanings, means and ends. *Ecological economics,* 24(1):73-87.

Brown, K., Turner, R.K, Hameed, H. & Bateman, I. 1998. Reply to Lindberg and McCool: a critique of environmental carrying capacity as a means of managing the effects of tourism development. *Environmental conservation*, 25(4):291-292.

Brown, T.J., Kaplan, R. & Quaderer, G. 1999. Beyond accessibility: preferences for natural areas. *Therapeutic recreation journa*l, 33:209-221.

Buckley, R. & Sommer, M. 2001. Tourism and protected areas: partnerships in principle and practice. Sydney: CRC for Sustainable Tourism and Tourism Council Australia.

Buhais, D. 2005. Disability tourism-OSSATE links. http://www.ossate.org/ Date of access: 18 September 2012.

Buhalis, D. & Darcy, S. 2011. Accessible tourism concepts and issues. Toronto: Channel View Publications.

Buhalis, D., Darcy, S. & Ambros, I., *eds*. 2012. Best practices in accessible tourism: inclusion, disability, ageing population and tourism. Bristol: Channel View Publishing.

Buhalis, D. & Law, R. 2008. Progress in information technology and tourism management: 20 year on and 10 years after the internet: the state of eTourism research. *Tourism management,* 29(4):609-623.

Buhalis, D., Michopoulou, E., Eichhorn, V. & Miller, G. 2005. Accessibility market and stakeholder analysis: one-stop-shop for accessible tourism in Europe (OSSATE). Guildford, UK: University of Surrey.

Bull, C., Hoose, J. & Weed, M. 2003. An introduction to leisure studies. Harlow: Prentice Hall.

Burnett, J.J. & Bender-Baker, H. 2001. Assessing the travel-related behaviors of the mobility-disabled consumer. *Journal of travel research,* 40(1):4-11.

Cameron, B., Darcy, S. & Foggin, S.E.A. 2003. Barrier-free tourism for people with disabilities in the Asian and Pacific Region (ST/ESCAP/2316). February. New York: UN ESCAP. http:// www.unescap.org/publications/detail.asp?id=971 . Date of access: 10 December 2012.

Cameron, B.M. 2000. Easy access Australia. Kew, Vic.: Easy Access Australia Publishing.

Carruthers, J. 1995. The Kruger National Park: a social and political history. Pietermaritzburg: University of Natal Press.

Cavinato, J.L. & Cuckovich, M.L. 1992. Transportation and tourism for the disabled: an assessment. *Transportation journal,* 31(3):46-53.

Center for Excellence in Universal Design. 1997. The 7 principles. http://www.universaldesign.ie/exploreampdiscover/the7principles. Date of access: 01 August 2013.

Center for Universal Design. 2003. Universal design principles. http://www.design. ncsu.edu:8120/cud Date of access: 19 July 2013.

Centers for Disease Control and Prevention. 2009. MMWR Morb. *Mortal. Wkly. Rep*., 58(16): 421-426. http://www.cdc.gov/chronicdisease/overview/ Date of access: 22 June 2014.

Chen, R.J.C. 2004. Uses of hospitality and leisure services: voices of visitors with disabilities. *Advances in hospitality and leisure*, 1:89-102.

Chimedza, R. & Peters, S.J. 2001. Disability and education in an African context: putting theory into practice from the perspective of different voices. Harare: College Press.

Chitima, S.S. 2013. Promoting an inclusive ethos: improving access opportunities for persons with disabilities to museums in Zimbabwe. Gwero, Zimbabwe: Midlands State University. (Dissertation - MA.)

Choruma, T. 2007. The forgotten tribe: people with disability in Zimbabwe. London: Progressio.

Clark, L.A. & Watson, D. 1995. Constructing validity: basic issues in objective scale development. *Psycological assessment*, 7(3):309-319.

Cohen, J. 1992. A power primer. *Psychological bulletin*, 112(1):155-159.

Columbia Tourism British. 2005. Characteristics of the commercial nature-based tourism industry in British Columbia. Tourism British Columbia. Research Services. http://www.wilderness-tourism.bc.ca/docs/Commercial_Nature-Based%20Tourism.pdf Date of access: 2 January 2013.

Commonwealth Department of Industry. Tourism and Resources. 2003. White Paper. The medium to long term strategy for tourism. Canberra: Department of Industry, Tourism and Resources.

Condeluci, A. 1995. Interdependence: the route to community. 2nd ed. Florida: CRC Press.

Connell, R.B., Jones, M., Mace, R., Mueller, J., Mullick, A., Ostroff, E., Stanford, J., Steinfeld, E., Story, M. & Vanderheiden, G. 2008. Universal design: applying principles to park settings, participant guide. Telnet Program March 14, 2008. National Center on Accessibility, USA.

Cooper, D.R. & Schindler, P.S. 2006. Business research methods. 9th ed. Boston, Mass.: McGraw-Hill.

Cordell, K. 1999. Outdoor recreation in American life: a national assessment of demand and supply. Champaign, Ill.: Sagamore Publishing.

Cortina, J.M. 1993. What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1):98-104.

Creswell, J.W. 2003. Research design: qualitative, quantitative, and mixed method approaches. 2nd ed. Boston, Mass.: Pearson.

Creswell, J.W. 2009. Research design, qualitative, quantitative, and mixed methods approaches. 3rd ed. Thousand Oaks, Calif.: Sage.

Creswell, J.W. 2012. Educational research: planning, conducting, and evaluating quantitative and qualitative research. 4th ed. Boston, Mass.: Pearson.

Crosby, R.W. 2010. It's the customer, stupid! Lessons learned from a lifetime of marketing. Annapolis, Md.: R.W. Crosby.

Dann, G.M.S. 1977. Anomie, ego-enhancement and tourism. *Annals of tourism research*, 4(4):184-194.

Darcy, S. 1998. Anxiety to access: the tourism patterns and experiences of New South Wales people with a physical disability. Sydney: Tourism New South Wales.

Darcy, S. 2000. Tourism industry supply-side perceptions of providing goods and services for people with disabilities. Sydney: New South Wales Ageing and Disability Department.

Darcy, S. 2002a. Marginalised participation: physical disability, high support needs and tourism. *Journal of hospitality and tourism management,* 9(1):61-72.

Darcy, S. 2002b. People with disabilities and tourism in Australia: a human rights analysis. (*In* Arola, E., Karkkainen, J. & Siitari, M-L., *eds*. Proceedings of Tourism and Well Being: 2nd Tourism Industry and Education Symposium, Jyvaskyla, Finland, 16-18 May, 137-166. p. 137-166.)

Darcy, S. 2003. Disabling journeys: the tourism patterns of people with impairments in Australia. (*In* Braithwaite, R.L. & Braithwaite, R.W., *eds*. CAUTHE 2003: riding the wave of tourism and hospitality research. Lismore, N.S.W.: Southern Cross University. p. 271-279.)

Darcy, S. 2004. Rolling rains report. http://www.rollingrains.com/archives/000055.html Date of access: 2 October 2013.

Darcy, S. 2007. Rolling rains report. http://www.rollingrains.com/archives/001979.html Date of access: 5 April 2014.

Darcy, S. 2008. Valuing accessible rooms: understanding accessible tourism accommodation information preferences. (Paper presented at Creating Inclusive Communities Conference, Association of Consultants in Access, Adelaide, Australia.)

Darcy, S. 2010. Inherent complexity: disability, accessible tourism and accommodation information preferences. *Tourism managemen,* 31:816-826.

Darcy, S., Cameron, B. & Pegg, S. 2010. Accessible tourism and sustainability: a discussion and case study. *Journal of sustainable tourism,* 18(4):515-537.

Darcy, S. & Dickson, T. 2009. A whole-of-life approach to tourism: the case for accessible tourism experiences. *Journal of hospitality and tourism management,* 16(1):32-44.

Darcy, S. & Pegg, S. 2011. Towards strategic intent: perceptions of disability service provision amongst hotel accommodation managers. *International journal of hospitality management,* 30:468-476.

Denman, R. & Clarkson, S. 1991. The disabled visitor. *Insight:* B40-B60.

Department of Tourism. 2012. Universal accessibility in tourism declaration. https://tkp.tourism.gov.za/Documents/UA%20DECLARATION.pdf Date of access: 2 February 2014.

Destination New South Wales. 2012. Nature based tourism# to NSW Year ended December 2012. http://www.destinationnsw.com.au/data/assets/pdf_file/0005/_193829/Nature-based-tourism-YE-Dec-12.pdf Date of access: 15 June 2014.

Dixit, K.M. 1989. An obsession with tourism. *Himal for development and environment,* 2(3):3-12.

Dobriansky, P., Suzman, R. & Hodes, R. 2007. Why population ageing matters: a global perspective. Washington, D.C.: National Institute on Aging.

Dower, J. 1945. National Parks in England and Wales. London: HMSO.

Dube, D.H. & Bertozzi, C.R. 2005. Glycans in cancer and inflammation: potential for therapeutics and diagnostics. *Nature reviews drug discovery,* 4: 477-488.

Duncan, D.F., White, J.B. & Nicholson, T. 2003. Using Internet-based surveys to reach hidden populations: case of nonabusive illicit drug users. *American journal of health behavior,* .27(3):208-218.

Duncan, R. 2007. Universal design-clarification and development: a report for the Ministry of Environment, Government of Norway. Raleigh, N.C.: North Carolina State University. Center for Universal Design. College of Design.

Dwyer, L. 2005. Relevance of triple bottom line reporting to achievement of sustainable tourism: a scoping study. *Tourism review international*, 9(1):79-938.

Dwyer, L. & Darcy, S. 2008. Chapter 4 - Economic contribution of disability to tourism in Australia. (*In* Darcy, S., Cameron, B., Dwyer, L., Taylor, T., Wong, E. & Thomson, A., *eds*. Visitor accessibility in urban centres. Gold Coast: Sustainable Tourism Cooperative Research Centre. p. 15-21.) (Technical Report 90040.)

Eagles, G. 2010. The age and origin of the central Scotia Sea. *Geophysical international journal,* 183(2):587-600.

Eagles, P.F.J. 2004. Trends affecting tourism in protected areas: policies, methods and tools for visitor management. (Proceedings of the Second International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected areas.) (Working Papers of the Finnish Forest Research Institute *2.*)

Eagles, P.F.J. & Wind, E. 1994. The advertising of Canadian ecotours in 1992. *Journal of applied recreation research*, 19(1):67-87.

Eichhorn, V. & Buhalis, D. 2007. The accessibility requiring market in Europe: socially and economically important. *e-Review of tourism research,* 5(2):34-36.

Eichhorn V., Miller, G., Michopoulou, E. & Buhalis, D. 2008. Enabling access to tourism through information schemes? *Annals of tourism research*, 35(1):189-210.

Eiesland, N.L. 1993. A troubling in my soul: womanist perspectives on evil and suffering. Maryknoll, N.Y.: Orbis Books.

Ellis, S.M. & Steyn, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values). *Management dynamics*, 12(4):51-53.

ELTIS (European Local Transport Service). 2001. Transport for people with reduced ENAT - European Network for Accessible Tourism. (Conference on Tourism for People with Disability, 24-28 September 2000. Bali, Indonesia. http://www.accessibletourism. org Date of access: 22 February 2013.

ENCAP (Environmentally Sound Design and Management Capacity Building for Partners and programs in Africa). 2012. http://srdis.ciesin.columbia.edu/cases/ south_africa-003.html. Date of access: 10 October 2012.

ESCAP (Economic and Social Commission for Asia and the Pacific). 2000a. Promotion of barrier-free tourrism for people with disabilities in the Asia and pacific region. Bangok: Economic and Social Commission for Asia Pacific.

ESCAP (Economic and Social Commission for Asia and the Pacific). 2000b. Promoting barrier free tourism for people with disabilities. (Asia-Pacific Conference on Tourism for People with Disability, 24-28 September 2000, Bali, Indonesia.)

ESCAP (Economic and Social Commission for Asia and the Pacific). 2001. Leadership and training seminar for persons with a disability. Vietnam: United Nations. Economic and Social Commission for Asia and the Pacific.

ESCAP (Economic and Social Commission for Asia and the Pacific). 2002. Asian and Pacific decade of disabled persons 1993 - 2002. United Nations. Economic and Social Commission for Asia and the Pacific. http://www.unescap.org/decade/ Date of access: 20 December 2002.

ESCAP (Economic and Social Commission for Asia and the Pacific). 2008. Disability at a glanceA profile of 28 countries and areas in Asia and the Pacific. Viëtnam: United Nations: Economic and Social Commission for Asia and the Pacific. http://www. unescap.org/esid/psis/disability Date of access: 16 November 2012.

European Commission. 2010. The 2009 ageing report: underlying assumptions and projection methodologies for the EU-27 Member States (2007-2060). European Commission.

Europeforall. s.a. http://www.europeforall.com/home.seam Date of access: 2 April 2013.

Eurostat. 2002. Health statistics: key data on health. Luxemburg: European Communities.

Eurostat. 2005. Population and social conditions: perceptual distribution of types of disability by sex and age group. http//epp.eurostat.cec.eu.int. Date of access: 16 June 2013.

Factor Analysis. http://www.ats.ucla.edu/stat/spss/output/factor1.htm Date of access: 29 September 2014.

Fallon, F. 2000. Nature tourism: managing for the environment. Washington, D.C.: Island Press.

Fearnhead, P. & Mabunda, D. 2003. Towards sustainability. (*In* Hall-Martin, A. & Carruthers, J., *eds*. South African National Parks: a celebration. Auckland Park: Horst Klemm.)

Ferrario, F.F. 1982. Method approach for evaluating tourist resources: case of South Africa. (*In* Singh, T.V. & Kaur, J., *ed*. Studies in tourism and wildlife parks conservation, Metropolitan Book Company, New Delhi. p. 114-135.)

Field A. 2005. Discovering Statistics Using SPSS. London: Sage.

Field, A. 2009. Discovering statistics using SPSS. 3rd ed. London: Sage.

Fisher, F., Miller, G.J. & Sidney, M.S. 2005. Handbook of public policy analysis: theory, politics and methods. New York: Taylor & Francis.

Forbes, K.A. 2009. Bermuda's accessibility and services for handicapped and disabled. http://www.bermuda-online.org/BPHA.htm Date of access: 29 September 2014.

Fradj, S.B. 2014. Democratize universal design. Kobe, Japan: Kobe Design University. (Thesis.)

Fredman, P. & Tryainen, L. 2010. Trontiers in nature-based tourism. *Scandanavian journal of hospitality and tourism*, 10(3):177-189.

Freeman, I & Selmi, N. 2010. French vs Canadian tourism response to the disabled. *Journal of travel research*, 49(4):471-485.

Garland-Thomson, R. 1997. Extraordinary bodies: figuring physical disability in American culture and literature. New York: Columbia University Press.

Gill, C.J. 1993. Isolation: confronting the painful social realities that come with disability. *Mainstream: magazine of the able-disabled,* 18(1):18-25.

Gillies, A. 2002. Using research in nursing: a workbook for practitioners. Oxon: Radcliffe Publishing.

Gilson, S.F. & DePoy, E. 2004. Disability, identity, and cultural diversity. *Review of disability studie*s, 1(1):16-23.

Ginnerup, S. 2009. Achieving full participation through universal design. Strasbourg: Council of Europe.

Gitonga, R.K., Ndirangu, M. & Githeko, J.M. 2013. The perceived extent of ICT integration in intra-university communication among the Kenyan universities. *Communications*, 1(2):6-21.

Goldsmith, S. 1997. Designing for the disabled: the new paradigm. Boston, Mass.: Architectural Press.

Gonsalves, P.S. 1987. Alternative tourism: the evolution of a concept and establishment of a network. *Tourism recreation research*, 12(2):9-12.

Goodall, B., Pottonger, G., Dixon, T. & Russel, H. 2005. Access to historic environments for tourists with disabilities: a compromise. *Tourism review international*, 8:167-176.

Gorsuch, R.L. 1983. Factor analysis. 2nd ed. Hillside, N.J.: Erlbaum.

Government of Zimbabwe. 2012. Zimbabwe population census 2012. http://www.Zimbabwe+Census,+2012&hl=en&sa=X&ei=wMtbVOefCs2v7AbtqYCgAg&ved=0CB0Q6AEwAA Date of access: 29 September 2014.

Grady, J. & Ohlin, J.B. 2009. Equal access to hospitality services for guests with mobility impairments under the Americans with Disabilities Act: implications for the hospitality industry. *International journal of hospitality management,* 28(1):161-169.

Green, M.J.B. & Paine, J. 1997. State of the world's protected areas at the end of the Twentieth Century. Cambridge: WCMC.

Gretzel, U., Fesenmaier, D. & O'Leary, T. 2006. The transformation of consumer behavior. (*In* Buhalis, D. & Costa, C., *eds*. Tourism business frontiers; consumers, products and industry. Oxford: Elsever Butterworth-Heinemann. p. 9-18.)

Grobbler-Du Plessis, I. & Van Reenen, T., *eds*. 2011. Aspects of disalibility law in Africa. Pretoria: Pretoria University Law Press.

Gröschl, S. 2007. An exploration of HR policies and practices affecting the integration of persons with disabilities in the hotel industry in major Canadian tourism destinations. *International journal of hospitality management,* 26(3):666-686.

Hall, C.M. 1988b. Wilderness in New Zealand. *Alternatives: perspectives on science, technology and environment,* 15(3):40-46.

Hall, C.M. & Boyd, S. 2005. Nature-based tourism in peripheral areas: development or disaster? Ontario: Channel View Publishers.

Hall, C.M. & Frost, W. 2010. Tourism and national parks: international perspectives on development, history and change. London: Routledge.

Harris, A. & Enfield, S. 2003. Disability, equality, and human rights: a training manual for development and humanitarian organisations. London: Oxfam.

HarrisInteractive Market Research. 2005. Research among adults with disabilities-travel and hospitality. Chicago, Ill.: Open Doors Organisation.

Higginbottom, K. 2004. Wildlife tourism: an introduction. (*In* Higginbottom, K., *ed*. Wildlife tourism: impacts and planning. Australia: Common ground publishing. p. 1-14.)

Hill, J. & Gale, T. 2009. Ecotourism and environmental sustainability: principles and practice. Surrey: Ashgate.

Horgan-Jones, M. & Ringaert, L. 2001. Accessible tourism in Manitoba. Niagara Falls, Canada: TTRA-travel and Tourism Research Association.

Hossain, A., Bailey, G. & Lubulwa, M. 2003. Characteristics and travel patterns of older Australians: impact of population ageing on tourism. Canberra: Bureau of Tourism Research.

Householder, J. 2001. Mobility impairments. http://atoz.iqhealth.com/HealthAnswers/encyclopedia/HTMLfiles/3246.html. Date of accessed 17-05-2012 Date of access: 7 August 2012.

Huh, C. & Singh, A.J. 2007. Families travelling with a disabled member: analysing the potential of an emerging niche market segment. *Tourism and hospitality research*, 7(3):212-229.

IFC (Institute for Digital Research and Education.) s.a. Annotated SPSS output factor analysis. http://www.ats.ucla.edu/stat/spss/output/factor1.htm. Date of access: 29 September 2014.

IFC (Institute for Digital Research and Education.). 2001. Annual report. Impairments under the Americans with Disabilities Act: implications for the hospitality imperialism. Manchester: Manchester University Press.

Index Mundi. 2014. Zimbabwe Age Structure. www.indexmundi.com/zimbabwe/age_structure.html. Dateof access: 06 March 2015.

Ingram, C.D. & Durst, P.B. 1989. Nature-oriented tour operators: travel to developing countries. *Journal of travel research*, 27(2):11-15.

International Features at the Rardee Center. 2014. Country Profile Zimbabwe. www.ifs.du.edu/ifs/frm_countryProfile.aspx?Country=ZW. Date of access: 06 March 2015.

International Union for Conservation of Nature (IUCN). 1994. http://www.britannica.com/EBchecked/topic/291448/International-Union-for-Conservation-of-Nature-IUCN. Date of access: 30 October 2012.

Iso-Ahola, E. 1982. Toward a social psychological theory of tourism motivation: a rejoinder. *Annals of tourism research*, 9(2):256-262.

Jang, S.C. & Wu, C.E. 2006. Senior's travel motivation and the influential factors: an examination of Taiwanese seniors. *Tourism management*, 27(1):306-316.

Jaquette, S. 2005. Maimed away from the earth: disability and wilderness. *Ecotone: journal of environmental studies*: 8-11.

Jennings, G. 2001. Tourism research. Sydney: Wiley.

Jepson, P. & Whittaker, R.J. 2002. Histories of protected areas: internationalisation. Johannesburg: Horst Klemm.

Jones, T. & Newburn, T. 2001. Widening access: improving police relations with hard to reach groups. London: Home Office Policing and Reducing Crime Unit. (Police Research Series. Paper 138.)

Khupe, W. 2010. Million disabled people struggle to survive. http://www.thezimbabweran.co.uk/news/36210/15. Date of access: 23 March 2013.

Khupe, W. 2012. Employment opportunities for disabled persons in NASCHO member organisations. Bulawayo: NUST. (Dissertation - Masters.)

Kim, S.E. & Lehto, X.Y. 2012. The voice of tourists with mobility disabilities: insights from online consumer complaints websites. *International journal of contemporary hospitality management,* 24(3):451-476.

Kinney, W.B. & Coyle, A. 1992. Predicting life satisfaction among adults with disabilities. *Archives of physical medicine and rehabilitation,* 73(9):863-869.

Kitchin, R. 1999. Morals and ethics of geographical studies of disability. *Geography and ethics: journey in a moral terrain*: 222-236.

Kline, P. 1994. An easy guide to factor analysis. New York: Routledge.

Knight, R.L. & Gutzwiller, K.J., *eds*. 1995. Wildlife and recreation: coexistence through management and research. Washington, D.C.: Island Press.

Kotler, P. 2009. Marketing management: a south Asian perspective. India: Pearson Education.

Krejcie, R.V. & Morgan, D.W. 1970. Determining sample size for research activities. *Educational and psychological measurement*, 30:607-610.

Kruger, M. & Saayman, M. 2010. Travel motivation of tourists to Tsitsikamma and Kruger National Parks. *SA journal of wildlife research*, 40(1):93-102.

Kutay, K. 1989. The new ethic in adventure travel. *Buzzworm: the environmental journal,* 1(4):31-36.

Kwan, P., Eagles, P.F.J. & Gebhardt, A. 2008. A comparison of ecolodge patrons' characteristics and motivations based on price levels: a case study of Belize. *Journal of sustainable tourism*, 16(6):698-718.

Laarman, J.G. & Durst, P.B. 1987. Nature travel in the tropics. *Journal of forestry*, 85(5):43-46.

Lais, G. 1995. Wilderness inquiry. *International journal of wilderness*, 1(2):26-29.

Lais, G., McAvoy, L. & Frederickson, L. 1992. Wilderness accessibility for people with disabilities: a report to the President and Congress of the United States on Section 507(a) of the Americans with Disabilities Act. Washington, D.C.: National Council on Disability.

Lane, B. 1990. Spreading the tourist load. *The Observer, Travelwatch*, 4 February.

Langford, N.P. 1905. The discovery of Yellowstone Park: expedition to the Yellowstone & Firehall Rivers in 1870. *Journal of the Washburn Expedition to the Yellowstone and Firehole Rivers in the Year 1870*.

Liachowitz, C.H. 1988. Disability as a social construct. Philadelphia, Pa.: University of Pennsylvania Press.

Lindberg, K. 1998. Economic aspects of ecotourism. North Bennington, Vt.: Ecotourism Society.

Lipp, E. & Van Horn, L. 2007. The transportation needs of people with developmental disabilities. Data-Enabled Travel. GeoAccess Challenge Team.

Longmore, P.K. & Umansky, L. 2001. The new disability history: American perspectives. New York: New York University Press.

Lovelock, B.A. 2010. Planes, trains and wheelchairs in the bush: attitudes of people with mobility-disabilities to enhanced motorised access in remote natural settings. *Tourism management,* 31(3):357-366.

Luard, N. & World Wildlife Fund. 1985. The wildlife parks of Africa. Salem, N.H.: Salem House.

Lucas, R.C., Hendee, J.C. & Stankey, G.H. 1990. The wilderness experience and managing factors that influence it. *Wilderness management:* 469-499.

Luiza, S.M. 2010. Accessible tourism: the ignored opportunity. *Annals of Faculty of Economics,* 1(2):1154-1157.

Lusher, R.H. & Mace, R.L. 1989. Design for physical and mental disabilities. *Disability studies,* 1(1):16-24.

Lusigi, W.J. 1984. Future directions for the Afrotropical realm. Washington, D.C: FAO..

Mace, R.L., Hardie, J.G. & Place, J.P. 1991. Accessible environments: accessible, adaptable, universal. Raleigh, N.C.: North Carolina State University. Center for Universal Design.

Mackelprang, R.W. & Salsgiver, R.O. 2009. Disability: a diversity model approach in human service practice. 2nd ed. Chicago, Ill.: Lyceum Books.

MacKenzie, J.M. 1988. The empire of nature: hunting, conservation and British. *Conservation and British Imperialism. (Manchester,* 43.)

Magome, D.T. & Collinson, R.F.H. 1998 From protest to pride: a case studystudy of Pilanesberg National Park, South Africa. *World Bank/WBI's CBNRM Initiative,* 6:2010.

Magome, M. 2003. Preface. (*In* Hall-Martin, A. & Carruthers, J., *eds*. South management. Amsterdam: Elsevier. p. 565-566.)

Managing Community Health Services. 2008. Bringing services to hard to reach populations. http://erc.msh.org/main-page.cfm?file=2.2.3.htm&module=chs&language= English Date of access: 29 July 2013.

Mandipa, E. 2013. New constitution disability friendly. *Chronicle*, 19 June. http://www.chronicle.co.zw/new-constitution-disability-friendly/ Date of access: 19 July 2013.

Mann, W.C. 2005. Aging, disability and independence: trends and perspectives. (*In* Mann, W.C., *ed*. Smart technology for aging, disability and independence. Hoboken, N.J.: Wiley. p. 1-32.)

Marongwe, N & Mate, R. 2007. Children with disability: their households' livelihoods and experiences in accessing key services. Rome: FAO.

Marpsata, M. & Razafindratsimab, N. 2010. Survey methods for hard-to-reach populations: introduction to the special issue. *Methodological innovations online,* 5(2):3-16.

Massachusetts. Department of Education. 2005. Disability definitions and related links. http://www.doe.mass.edu/sped/definitions.html. Date of access: 30 May 2012.

Matthews, M.H. & Vujakovic, P. 1995. Private worlds and public places: mapping the environmental values of wheelchair users. *Environment and planning* A, 27:1069-1083.

McAvoy, L. 2001. Outdoor for everyone: opportunities that include people with disabilities. *Parks and recreation*, 36(8):24-36.

McAvoy, L., Holman, T., Goldenberg, M. & Klenosky, D. 2006. Wilderness and persons with disabilities:transferring the benefits to everyday life. *International jornal of wilderness,* 12(2):23-35.

McAvoy, L., Schatz, C., Stutz, M., Schleien, S. & Lais, G. 1989. Integrated wilderness adventure: effects on personal and lifestyle traits of persons with and without disabilities. *Therapeutic recreation journal,* 23(3):50-64.

McCormick, B.P. 2000. Outdoor recreation pursuits of people with disabilities: a research report. Bloomington, Ind.: Indiana University. Recreation and Park Administration.

McCormick, B.P. 2001. People with disabilities: national survey of recreation and the environment. Research report. (Available from National Center on Accessibility, Bloomington, Ind.) (Unpublished.)

McKercher, B. & Chan, A. 2005. How special is special interest tourism? *Journal of travel research,* 44(1):21-31.

McNeely, J.A. & Miller, K.R., *eds*. 1984. National parks, conservation and development: the role of protected areas in sustaining society. Washington, D.C: Smithsonian Institution Press.

Mehmetoglu, M. 2007. Typologising nature-based tourists by activity: theoretical and practical implications. *Tourism management*, 28:651-660.

Michopoulou, E. & Buhalis, D. 2006. Developing an eTourism platform for accessible tourism in Europe: technical challenges. Vienna: Springe: Information and Communication Technologies in Tourism.

Moscardo, G. 2008. Building community capacity for tourism development. New York: CABI.

Nash, R. 1973. Wilderness and the American mind. New Haven, Conn.: Yale University Press.

National Council for Persons with Physical Disabilities. s.a. http://www.ncppdsa.co.za Date of access: 12 June 2013

National Parks and Access to the Countryside Act. 1949. http://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97. Date of access 11 June 2013.

Neufeldt, A.H. & Enns, H. 2003. In pursuit of equal participation: Canada and disability at home and abroad. Concord, Ont.: Captus Press.

New South Wales National Parks and Wildlife Service Library.

New South Wales. Tourism. 2000. Disability action plan: 1 January 2000 to 31 December 2002. Sydney: Tourism New South Wales.

New, T.R. 1987. Butterfly conservation. Melbourne: Entomology Society of Victoria. *Journal*, 1(4):31-36.

Newsome, D., Moore, S.A. & Dowling, R.K. 2002. Natural area tourism: ecology, impact and management. Ontario, Canada: Channel View Publications.

Ngwena, C., *et al.* 2013. African Disability Rights Yearbook. Pretoria: Pretoria University Law Press (PULP).

Noss, R.F. 1991. Sustainability and wilderness. *Conservation biology,* 5(1):120-122.

Odden, B. 2008. Comparison of a hyperspectral classification method implemented in two remote sensing software packages: a study based on a CHRIS/PROBA dataset in Switzerland. Zurich: Geographisches Institut der Universität Zürich.

O'Grady, A. 1990. The challenge of tourism, ecumenical coalition of third world tourism. Washington, D.C.: Island Press.

Ohlin, J.B. 1993. Creative approaches to the Americans with Disabilities Act. *Cornell hotel and restaurant administration quarterly,* 34(5):19-22.

Oliver, M. 1990. The politics of disablement. Houndmills: Macmillan.

Oliver, M. 1993. Social work: disabled people and disabling environments. London: Kinsley.

Oliver, M. 1996. Understanding disability: from theory to practice. Basingstoke, Houndmills: Macmillan.

O'Neill, M. & Ali Knight, J. 2000. Disability tourism dollars in Western Australia hotels. *FUI hospitality review,* 18(2):72-88.

Orams , M.B. 2002. Feeding wildlife as a tourism attraction: a review of issues and impacts. *Tourism management*, 23:281-293.

Orams, M. 1995. Towards a more desirable form of ecotourism. *Tourism management*, 16:3-8.

Orams, M.B. 2002. Feeding wildlife as a tourism attraction: a review of issues and impacts. *Tourism management*, 23(3):281-293.

Ozturk, Y., Yayli, A. & Yesi Ltas, M. 2008. Is the Turkish tourism industry ready for a disabled customer's market? The views of hotel and travel agency managers. *Tourism management, 29*(2):382-389.

Packer, T. & Carter, M. 2004. Out of the blue! Valuing the disability market in tourism. (Report of the 5th National Nican Conference, Perth, 20-22 September 2004. Centre for Research into Disability and Society.)

Packer, T., McKercher, B. & Yau, M. 2007. Understanding the complex interplay between tourism, disability and environmental contexts. *Disability & rehabilitation,* 29(4):281-292.

Packer, T., Small, J. & Darcy, S. 2008. Technical Report 90044: tourist experiences of individuals with vision impairment STCRC. http://www.crctourism.com.au/default.aspxg Date of access: 25 August 2013.

Packer, T.L., Mckercher, B. & Yau, M, 2007. Understanding the complex interplay between tourism, disability and environmental contexts. *Disability and rehabilitation* 29(4):281-292.

Packer, T.L., Mckercher, B. & Yau, M.K. 2002. Understanding the complex interplay between tourism, disability and environmental contexts. *Disability and rehabilitation*, 29(4):281-292.

Pansiri, J. 2005. Pragmatism: a methodological approach to researching strategic alliances in tourism. *Tourism and hospitality planning & development*, 2(3):191-206.

Parks & Benefits. 2007. Master guide on accessibility of protected areas for all. European Regional Development Fund.

Patton, C. 1995. The disabled community and national parks. Cape Town: University of Cape, Town. (Dissertation - Hons.)

Patton, C. 1998. Environmental access for people with disabilities in South African conservation parks. Cape Town: University of Cape Town. (Dissertation - MSc.)

Patton, C. 2013. Universal accessibility in South African National Parks. 2013 status report. Pretoria: SANParks.

Pegg, S. & Patterson, I. 2011. Ageing travelers: seeking an experience: not just a destination. (*In* Buhalis, D. & Darcy, S., *eds*. Accessible tourism: concepts and issues. Bristol: Channel View Publications. p. 72-96.)

Perry, A.H.T. 1929. National and other parks. Cape Town: n.p.

Pfeiffer, D. 2001. The conceptualization of disability. (*In* Barnatt, S.N. & Mandell Altman, B., *eds*. Exploring theories: an expanding methodologies. *Research in social science and disability,* 2(1):29-52.

Pfieffer, D. 2002. The devils are in the details: the ICIDH2 and the disability movement. *Disability & society,* 15(7):1070-1082.

Pomona. 2004. Health Indicators for people with intellectual disability. http://www.pomonaproject.org/3_health_indicators.pdf. Date of access: 25 August 2013.

Pulp. 2013. *The African Disabilities Rights Yearbook 2013*. University of Pretoria Press. Pretoria

Prost, A.L. 1992. Leisure and disability: a contradiction in terms. *World leisure & recreation,* 34(3):8-9.

Rains, S. 2004. Universal design and the international travel & hospitality industry. (Proceedings of Designing for the 21st Century III, Rio de Janeiro, Brazil, 7th - 12th December, 2004. p. 1-30.) http://www.designfor21st.org/proceedings/proceedings/ precon_rains.html Date of access: 1 October 2013.

Rains, S. 2006. Forum: Travel and tourism, through the lens of disability studies. *Review of disability studies: an international journal,* 2(2).

Rains, S. 2009a. Inclusive tourism: participant/observer notes on the global paradigm shift towards solutions. (Paper presented at the Neurology of the Third Millenium: For Well-Being in Disability-Quality of life from Rehabilitation to Accessible Tourism. Milan.)

Ray, N.M. & Ryder, M.E. 2003. ‘‘Ebilities’’ tourism: an exploratory discussion of the travel needs and motivators of the mobility-disabled. *Tourism management*, 24(1):57-72.

Republic of South Africa. 2006. Constitution of the republic of South Africa. http://www.acts.co.za/constitution-of-the-republic-of-south-africa-act-1996/ Date of access: 22 September 2013.

Republic of South Africa. 1997. Integrated national disability strategy: White Paper. Pretoria: Government Printers. http://digitalcommons.ilr.cornell.edu/gladnetcollect/145 Date of access: 11 November 2013.

Republic of South Africa. Department of Environmental Affairs and Tourism. 1996. White Paper on development and promotion of tourism in South Africa. Pretoria: Department of Environmental Affairs and Tourism.

Richter, L.K. 1989. The politics of tourism in Asia. Honolulu, HI: University of Hawaii Press.

Robb, G. & Ewert, A. 1987. Risk recreation and persons with disabilities. *Therapeutic recreation journal,* 21(1):58-69.

Roggenbuck, J.W. & Driver, B.L. 2000. Benefits of non facilitated uses of wilderness. USDA Forest Service Proceedings. *RMRS 1*5(3): 23-27.

Roggenbuck, J.W. & Driver, B.L. 2000. Benefits of nonfacilitated uses of wilderness. (*In* McCool, S.F., Cole, D.N., Borrie, W.T. & O'Loughlin, J., *comps*. Wilderness science in a time of change. Conference. USDA Forest Service Proceedings RMRS, v. 3:15.)

Rorty, R. 1991. Title essays on Heidegger and others. Cambridge: Cambridge University Press.

Rosen, F. 1997. How to travel: a guidebook for persons with a disability. Chesterfield responses in the United Kingdom. *Tourism review international,* 8(3):167-176.

Rosen, F. 2007. Is international travel accessible for persons with a disability? (A position paper.) Independent Living Institute. http://www.independentliving.org/docs54/ fredrosen.html Date of access: 23 June 2012.

Ross, G.F. 2004. Ethics, trust and expectations regarding the treatment of disabled staff within a tourism/hospitality industry context. *International journal of hospitality management,* 23(5):523-544.

Ross, J-E. 2001. Water-based outdoor recreation and persons with disabilities. Outdoor recreation & persons with disabilities. Washington, D.C.: Educational Resources Information Center (ERIC).

Rossetti, R. 2006. The seven principles of universal design. *Action magazine*, December. http://www.udll.com/media-room/articles/the-seven-principles-of-universal-design/ Date of access: 01 August 2013.

Rossetti, R. 2009. Universal design approach for the hospitality industry. (Paper presented at the Hospitality Deign 2009 Expo & Conference.)

Saayman, M. & Saayman, A. 2006. Estimating the economic contribution of visitor spending in the Kruger National Park to the regional economy. *Journal of sustainable tourism*, 14(1):67-81.

Saayman, M. & Saayman, A. 2009. Why travel motivation and socio-demographics matter in managing a national park. *Koedoe,* 51(1):1-9.

Saayman, M., Slabbert, E. & Van der Merwe, P. 2009. Travel motivation: a tale of two marine destinations in South Africa. *South African journal for research in sport, physical education and recreation*, 31(1):81-94.

Samaha, A.M. 2007. What good is the social model of disability*? University of Chicago law review:* 1251-1308. (Working paper no. 166.)

SANParks. 2014. Africa's premier wildlife tourism destinations. http://www.sanpaks. org. Date of access: 22 August 2013.

SAS Institute. 2011. SAS OnlineDoc® 9.3. Cary, NC: SAS Institute Inc.

Sawyer, A. & Bright, K. 2006. The access manual: designing, auditing and managing inclusive built environments. 2nd ed. Malden, Mass.: Blackwell Publishers.

Scandic Hotels. s.a. Accessibility at the hotels. http://www.scandichotels.com/always-at-Scandic/Special-needs/Accessibility-at-the-hotels Date of access: 28 May 2012.

Seelman, K.D. 2004. Trends in rehabilitation and disability: transition from a medical model to and integrated model. (National Rehabilitation Conference Keynote. Tokorozawa, Japan: National Center for Persons with Disabilities.) *Disability world, 22*. http://www/disabilityworld. org. Date of access: 22 January 2013.

Shaghaghi, A., Bhopal, R. & Sheikh, A. 2011. Approaches to recruiting hard-to-reach populations into research: a review of literature. *Health promotion perspectives*, 1(2):86-94.

Shakespeare, T. & Watson, N. 2002. The social model of disability: an outdated ideology? *Research in social science and disability*, 2:9-28.

Shapiro, J.P. 1993. No pity: people with disabilities forging a new civil rights movement. New York: Times Books.

Sharma, S. s.a. Public policy for people with disabilities: the UN and WHO perspectives. *Health policy,* 21(4):1-4.

Shaw, G., Veitch, C. & Coles, T. 2005. Access, disability and tourism: changing the responses in the UK. *Tourism review international,* 8:167-176.

Shi, Y. 2006. The accessibility of Queensland visitor information centers' websites. *Tourism management,* 27(5):829-841.

Slabbert, E. & Du Plessis, L. 2013. Do socio-demographic factors influence the travel behaviour of visitors to nature-based tourism products in South Africa? *African journal for physical, health education, recreation and dance (AJPHERD),* 19(3):639-660.

Small, J. & Darcy, S. 2011. Understanding tourist experience through embodiment: the contribution of critical tourism and disability studies. (*In* Buhalis, D. & Darcy, S., *eds*. Accessible tourism concepts and issues. Bristol: Channel View Publications. p. 72-96.)

Smith, R W. 1987. Leisure of disabled tourists: barriers to participation. *Annals of tourism research,* 14(2):376-389.

Snyman, J.A. 2000. The physical disabled tourist in Gauteng: issues, challenges and solutions. Potchefstroom: PU vir CHO. (Mini-Dissertation·- Hons.)

Snyman, J.A. 2002. Discussion on the barriers and constraints faced by people with disabilities. [Email to:] Woolf.P. (thewoolf@mweb.co.za) July, 22.

Snyman, J.A. 2004. The needs of tourists with disabilities. Potchefstroom: Potchefstroom University for Christian Higher Education. (Dissertation - MA.)

SPSS Inc. 2014. IBM SPSS Statistics Version 22, Release 22.0.0, Copyright© IBM Corporation and its licensors. http://www-01.ibm.com/software/analytics/spss/ Date of access: 11 November 2013.

Stanley, H.J., *comp*. 1977. History of royal national park. (Unpublished.)

Statistics South Africa. 2011. Census 2011 Profile of older persons in South Africa-Report 03-01-60. Statistics SA.

Stein, M. & Lord, J. Accessing economic, social and cultural rights: the United Nations Convention on the Rights of Persons with .Rights Law in a Global Context. Bilbao: Deusto University Press,

Steinfeld, E. 1994. The concept of universal design. (Proceedings of the Sixth Ibero-American Conference on Accessibility.)

Steyn, H.S. 2000. Practical significance of the difference in means. *South African journal of industrial psychology*, 26 (3):1-3.

Story, M., Mueller, J. & Mace, R. 2011. The universal design file: designing for people of all ages and abilities. Raleigh, N.C.: NC State University: Center for Universal Design.

Stringer, L.A. & McAvoy, L.H. 1992. The need for something different: spirituality and wilderness adventure. *Journal of experiential education*, 15(1):13-20

Swain, J. & French, S. 2000. Towards an affirmation model of disability. Disability *& society,* 15(4):569-582.

Swartz, J.A. 2012. Substance abuse in America: a documentary and reference guide. Santa Barbara, Calif.: ABC-CLIO.

Symonds, W.C. 1998. Far from the tour bus crowd: track gorillas in Uganda, explore a rainforest, or pedal across France. *Business week*, 3587:102.

Tashakkori, A. & Teddlie, C. 1998. Mixed methodology: combining qualitative and quantitative approaches. Thousand Oaks, Calif.: Sage.

Tashakkori, A. & Teddlie, C., *eds*. 2003. Handbook of mixed methods in social and behavioral research. Thousand Oaks, Calif.: Sage.

Teddlie, C. & Tashakkori, A. 2009. Foundations of mixed methods research: integrating qualitative and quantitative approaches in the social and behavioural sciences. Thousand Oaks, Calif.: Sage.

Thorsell, J.W. & McNeely, J.A. 1988. Jungles, mountains and islands: how tourism can help conserve the natural heritage. (First Global Conference Tourisma Vital Force for Peace, 1988.)

Tisdell, C. & Asian-Australia Joint Research Project. 1984. Tourism, the environment, international trade and public economics. Canberra: ASEAN-Australia Joint Research Project.

Touch Ross. 1993. Profiting from opportunities- a new market for tourism. London: Touch Ross.

Tourism Australia. 2005. Annual Report 2005/2006. Sydney: Government of Australia.

Tourism British Columbia. 2005. http://srdis.ciesin.columbia.edu/cases/south_africa-003.html. Date of access 10 October 2012.

Turco, D.M., Stumbo, N. & Garncarz, J. 1998. Tourism constraints: people with disabilities. *Parks and recreation journal,* 33(9):78-84.

Uhlenberg, P. 2009. International handbook of population aging. New York: Springer.

UNESCAP. 2000. Conditions to promote barrier-free tourism for people with disabilities and older persons. Economic and Social Commission for Asia and the Pacific (ESCAP). (Presentation at the National Workshop on Sustainable Tourism Development in China, Tianjin, China.)

United Nations. 2006. Convention on the Rights of Persons with Disabilities. Final report of the Ad Hoc Committee on a Comprehensive and Integral International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities. [A/61/611.]

United Nations. 2009. Enable: development and human relations for all. http//www.un. org/disabilities/ Date of access: 16 July 2012.

United Nations. 2009. Factsheet: Persons with disabilities. http://www.un.org/esa/ socdev/enable/rights/convtexte. Date of access: 20 August 2012.

United Nations. 2014. 2014 United Nations List of Protected Areas. http://unep-wcmc.org/system/dataset_file_fields/files/000/000/263/original/2014_UN_List_of_Protected_Areas_EN_web.PDF?1415613322. Date of access: 8 March 2015.

United Nations. Economic and Social Commission for Asia and the Pacific. 2007. Promoting tourism for people with disabilities. (Press release 22.11.2007.) http://www. scoop.co.nz/stories/ wo0711/s00956.htm. Date of access: 27 November 2007.

United States of America. 1990. Americans with Disabilities Act. http://www.ada.gov/ pubs/ada.htm Date of access: 20 March 2013.

United States. 1990. Americans with disabilities, Act (ADA) of 1990, as amended. http://www.ada.gov/pubs/ ada.htm. Date of access: 16 July 2012.

UNWTO. 2002. Annual report, 2002. Madrid: UNWTO. http://www2.unwto.org/ annual-reports Date of access: 22 March 2013.

UNWTO. 2003. Annual report, 2003. Madrid: UNWTO. http://www2.unwto.org/ annual-reports Date of access: 22 March 2003.

UNWTO. 2005. Technical cooperation service report UNWTO. Madrid: UNWTO.

UNWTO. 2009a. Annual report, 2009. Madrid: UNWTO. http://www2.unwto.org/ annual-reports Date of access: 20 March 2013.

UNWTO. 200b9. World Tourism Organization. Tourism Higlights, Edition 2009. http://unwto.org/facts/eng/pdf/highlights/UNWTO_Highlights09_en_LR.pdfwww .unwto.org. Date of access: 23 September 2013.

UNWTO. 2012. Annual Report, 2012. Madrid: UNWTO. http://www2.unwto.org/ annual-reports Date of access: 7 May 2012.

Uysal, M. & Jurowski, C. 1994. Testing the push and pull factors. *Annals of tourism research*, 21(4):844-846.

Valentine, P.S. 1992. Review: nature based tourism. (*In* Weiler, B. & Hall, C.M., *eds*. Special interest tourism. London. Belhaven Press. p. 105-127.)

Van der Merwe, P. & Du Plessis L. 2014. Game farm and hunting tourism. Stellenbosch: Sun Media Metro.

Van Horn, L. 2001. Disability travel in the United States: recent research and findings. (Paper presented at the 11th International Conference on Mobility and Transport for Elderly and Disabled Persons (TRANSED): Benchmarking, Evaluation and Vision for the Future. June 18-22, 2007, at the Palais des congrès de Montréal.)

Van Horn, L. 2011. The United States: travelers with disabilities. (*In* Buhalis, D., Darcy, S. & Ambrose, I., *eds*. Best practices in accessible tourism; insclusion, disability, ageing population and tourism. Bristol: Channel View Publication. p. 65-77.)

Van Sickle, K. & Eagles, P.F.J. 1998. User fees and pricing policies in Canadian senior park agencies. *Tourism management*, 19(3):225-235.

Var, T., Yeşiltaş, M., Yayli, A. & Öztürk, Y. 2011. A Study on the travel patterns of physically disabled people. *Asia Pacific journal of tourism research*, 16(6): 599-618.

Vash, C.L. 2001. Disability attitudes for all latitutes. *Journal of rehabilitation*, 67(1):38-42.

Walliman, N. 2011. Research methods: the basics. New York: Routledge.

Wang, D.G. 2004. Push-pull factors in mountain resorts: a case study of Huangshan Mountain as world heritage. *Chinese geographical science*, 14(4):368-376.

Wang, Y. 2011. Ageing travel market and accessibility requirements. (*In* Buhalis D. & Darcy, S., *eds*. Accessible tourism: concepts and issues. Bristol: Channel View Publications. p. 191-200.)

Weaver, D.B. 2002. Hard-core ecotourists in Lamington National Park, Australia. *Journal of ecotourism*, 1(1):19-35.

Weaver, D.B. & Lawton, J.L. 2002. Overnight ecotourists market segmentation in the Gold coast hinterland of Australia. *Journal of travel research*, 40(3):270-280.

Weiss, A. & Rapoport, H. 2003. The optimal size for a minority. *Journal of economic behavior & organization,* 52(1):27-45.

Wells, M.P. 1997. Economic perspectives on nature tourism, conservation and industry. *International journal of hospitality management,* 28:161-169.

Wight, P.A. 2001. Ecotourists: not a homogeneous market segment. (*In* Weaver, D.B., *ed*. Encyclopedia of ecotourism. New York: CABI. p. 37-62.)

Wilderness Tourism Association. 2007. A tourism industry strategy for forests. http://www. wilderness-tourism.bc.ca/docs/ Date of access: 3 June 2013.

Wilderness Tourism Association. 2007. A tourism industry. http://www.wilderness-tourism.bc.ca/docs/ Date of accesse: 3 June 2013.

Williams, D.R. 2009. Sustainability and public access to nature: contesting the right to roam. *Journal of sustainable tourism,* 9(5):361-371.

World Health Organization. 2002. Towards a common language for functioning disability and Health-ICF. Geneva: World Health Organization

World Health Organization. 2007. Global age: friendly cities guide. Geneva*:* World Health Organization. http://www.who.int/ageing/ age_friendly_cities/en/index.html Date of access: 17 June 2012.

World Health Organization. 2012. What is disability? http://www.who.int/topics/ disabilities/en/ Date of access: 17 June 2012.

Yates, K. 2007. Understanding the experiences of mobility-disabled tourists. *International journal of tourism policy,* 1(2):153-166.

Yau, K.S.M., McKercher, B. & Packer, T.L. 2004. Traveling with a disability: more than an access issue. *Annals of tourism research,* 31(4):946-960.

Yoon, Y. & Uysal, M. 2005. An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26(1):45-56.

Zaradic, P.A. & Pergams, O.R.W. 2007. Videophilia: implications for childhood development and conservation. *Journal developmental procedures,* 2:130-144.

Zeller, J.A. 2008. Wilderness and accessibility. *International journal of wilderness*, 14(1):15-24.

Zimmer, Z., Brayley, R. & Searle, M. 1995. Whether to go and where to go: identification of important influences on seniors' decisions to travel. *Journal of travel research,* 33(3):3-10.

Zimmermann, R. 2006. Universal design means accessibility for one and all. http://www.facilitiesnet.com/ada/article/Accessibility-for-One-and-All--5573 # Date of access: 12 January 2014.

ZIMPARKS. 2014. http://www.zimparks.co.zw Date of access: 20 August 2013.

ANNEXTURE 1-QUESTIONNAIRES

QUESTIONNAIRE FOR TOURISTS WITH DISABILITIES

Section A: Demographics

1. Age: <20yrs ☐ 20-30yrs ☐ 31-40yrs ☐ 41-50yrs ☐ 51-60yrs ☐ 61+ ☐
2. Gender : Male ☐ Female ☐
3. Type of disability: Mobility ☐ Hearing ☐ Visual ☐

   Other (Specify)

   _____
4. Nationality: _____
5. Home Language:_____
6. Employment Status: Employed ☐ Unemployed ☐ Self employed ☐

   Other (specify)

   _____
7. Profession:

   _____
8. Education attainments:
   No formal education ☐ Primary education ☐ Secondary education ☐

   Tertiary education ☐

Section B: Travel Patterns

9. Which of the following attractions have you ever visited? (Tick all applicable):

a) National Park ☐
b) Nature Reserve ☐
c) Wildlife Sanctuary ☐
d) Botanical Garden ☐
e) Holiday resorts ☐
f) Other nature based tourism facility
(specify)_____
_____
_____

10. To what extent do you visit nature-based tourism areas?

Lesser extent ☐ Moderate extent ☐ Greater extent ☐

11. Nature of trip: Local ☐ Regional ☐ International ☐

12. To which part of the world have you travelled for nature based tourism? (if any)(tick all applicable) ☐
Africa
South America ☐
North America ☐
Asia ☐
Europe ☐
Middle East ☐
Australia ☐
Specify the country or region visited_____

13. a.Normally how long is your stay at the destination?
Day trip ☐ 1 Overnight ☐ 2-3 Overnights ☐ 3-5 Overnights ☐
More than 5 overnights ☐

b. How often do you take the trips per year?
Once ☐ Twice ☐ thrice ☐ 4Times ☐ 5 Times ☐

More than 5 times ☐

14. What determines the frequency and duration of your visits to natural areas? (Tick the most applicable)

Cost ☐ accessibility problems ☐ lack of time ☐ Health ☐

Any other (specify)

_____

15. What mode of transport do you usually use to get to the natural destination?

Road ☐

Rail ☐

Air ☐

Water ☐

15.a) Please specify the type of transport and the reason for your choice_____

_____

_____

16. Do you usually travel with some company? Yes ☐ ☐ No

17. If you travel with some company, how many people do you usually travel with?

One ☐ Two ☐ Three ☐ More than three ☐

18. What form of accommodation do you usually prefer when you travel to these natural environments?

Lodges ☐ Hotels ☐ Guest Houses ☐ Friend/relative's place ☐

Tents ☐ Caravan ☐ Self-catering chalets ☐ Budget accommodation ☐

Other (specify)_____

18.a) Why do you prefer this type of accommodation_____

_____

_____

19. Which activities do you usually engage in when you visit natural areas (you can choose more than one answer);

Game drives ☐ Bird Watching ☐ Swimming ☐ Fishing ☐

Scenic drives ☐ Game trekking ☐ Relaxing ☐

Others (Please specify)_____

20. On average, how much do you spend per visit?
<$50 (<R500) ☐ $50-$100 (R500-R1000) ☐ $101-$500 (R1001-R5000) ☐

$501-$1000 (R5001-R10000) ☐ More than $1000 (>R10000) ☐

Section C: Travel motivation and needs

21. What motivates you to travel to natural environments? (tick all applicable)

Love for nature	☐	Escape from the routine	☐
For relaxation	☐	Spending time with family	☐
Love for adventure	☐	proving your ability to travel	☐
For health reasons	☐	Learning new things	☐
Excitement	☐	Ego-enhancement	☐

Other reasons (specify) _____

22. What accessibility challenges do you usually face when you travel to parks or natural areas?

Inaccessible transport ☐ Unfriendly staff ☐ Inaccessible restrooms ☐

Inaccessible walkways ☐ Absence of ramps ☐

Absence of information in braille ☐

Absence of information in sign language ☐ Staff ignorant of disability needs ☐

Other (please specify)_____

_____

23. Rate the following universal accessibility features in terms of their importance to you when visiting parks and other natural environments;
    Key:
    1. ***Not important at all***
    2. ***Slightly important***
    3. ***Important***
    4. ***Very important***
    5. ***Extremely important***

No.	Accessibility expectations	1	2	3	4	5
	Transportation					
1	The vehicle, bus, coach accessible to people with visual, mobility and hearing disabilities					
2	Availability of low flow entrance into the bus, coach, train to allow for independence during boarding					
3	Availability of seats suitable for persons with various disabilities on the coach, car, bus					
4	Presence of restraining systems for safety during the ride					
5	Presence of a stable, non-slip access path to the bus station					
6	Key areas clearly marked on the access path with solid ground surface indicators for people with vision impairment					
7	Handrails provided to assist passengers to cope with changes of level, ramps, a narrowing or a change of direction of the access path					
	On arrival					
8	Adequate accessible parking, ideally 2 spaces, each at least 3.6 metres wide					
9	Accessible parking must be clearly marked with the wheelchair symbol					
10	Additional signage adjacent to bays “For help or assistance,					

	call reception".					
11	Clear illuminated path between parking and entrance. Accessible to all, including wheelchair users					
12	Availability of assistance from the car park to the reception					
13	Access ramps at change of level, with maximum slope gradient of 1:12, at main entrance to the reception and the parking location					
14	Main entrance door to be very wide (minimum width of 800 mm)					
15	Low or no threshold at the entrance door					
16	Automatic open door or Door openable with "automatic push plate", height 1200 mm. If not automatic					
17	Clearly signed directions that attracts the attention of people with diverse disabilities					
18	Distance from the parking area to entrance to be less than 25 meters					
19	Contrast markings – used in all public indoor areas					
20	Absence of steps and staircases					
	Reception desk					
21	Cane holders attached to front of desk					
22	Seating and table available close to front desk so that guests may sit down at registration.					
23	Hearing loop in reception desk. Marked with symbol sign					
24	Vibrating wake up/fire alarm device available to borrow.					

	Clearly signed on desk					
25	Contrasting colour of rug leading from entrance door to the reception desk.					
26	Low height reception counter, accessible to guests of all sizes and disabilities.					
27	A receptionist who is able to understand, interpret and communicate in braille and sign language					
	Guiding System					
28	Information about the park available in braille and audio form					
36	Website equipped with audio descriptive material for visually impaired and other users					
29	Adequate text information for deaf people					
30	The possibility to have your personal assistant					
31	Having a guide on site					
32	Possibility of the visually impaired to bring their guide dogs					
33	Signs and maps are illuminated or tactile					
34	Signage is in large and audible form to cater for all					
35	Entrance marked with lighting					
	IN THE PARK					
37	Moving around independently-without an assistant					
38	Park employees who view me as a normal person					
39	Interpretation Centres/Park Museums equipped with tactile exhibits, audio descriptions and animal sound options					

40	Where the natural environment prohibits providing full accessibility some form of virtual tour is available to accommodate visitors with disabilities (both physical and sensory disabilities)					
	Accessibility to the water-based activities					
41	Availability of a wide path leading to the beach or water body, wide enough to accommodate persons using assistive devices.					
42	Ramps leading to the water					
43	Benches at the beach					
44	Smooth access to fishing platforms					
45	Railings on the fishing platform					
46	Wheel guides on fishing platforms					
47	Fishing rod holder/supporter at the fishing platform					
48	Safe swimming areas clearly marked to cater for all disabilities					
49	Availability of ramps that lead into the swimming area					
	Trails/Paths/Walkways					
50	Walking area free from hazards e.g. suspended objects, furniture					
51	Guiding lines in the form of railings, stone edges, or logs at each edge of the path					
52	Surface must be low-vibration and easily trafficable by wheelchairs, solid, even, step less, anti-slip and joint less.					
53	Resting areas with tables and benches along the path other than at the beach.					

54	Signage to indicate direction to the resting places					
55	Handrails (with good grip) on both sides of ramps with gradients in excess of 1:16					
56	Accessible nature trails within rest camps or within easy distance of accommodation or entrance points					
	Bridges					
57	Accessible for visitors with disabilities, with fall protection-no steps.					
58	The bridge has a colour contrast marking on the edge					
59	There are handrails with good grip on both sides					
60	The material have a non-slip, smooth and even surface					
61	Solid rail for visitors with white stick (diameter: 10 cm, top edge at 25 cm)?					
	Bird watching hides					
62	The bird watching hide is connected with an accessible path or vehicle					
63	There is smooth access to the bird watching hide					
64	Rails and wheel guides on bird watching hides					
65	Benches to sit on at the hide					
66	Openings at heights of 70-140 cm where people can look out while seated					
70	Scent exhibits to encourage all people to absorb the natural environment through smell					
	Safari and game drives					
67	Game drive vehicles are accessible to people with mobility and visual impairments					

68	Guides are knowledgeable about disability needs and wants					
69	There is safety and security for people with diverse disabilities					
	Restrooms					
71	Are easily accessible from the trail, reception area or any other part of the park.					
72	Smooth access without level differences in the form of steps or stairs					
73	Foldable armrests					
74	Toilet paper holder on armrest					
75	It is possible to reach the washbasin/water taps when seated on the toilet					
76	Water taps easy to operate-with single lever					
77	Easy to operate door lock from the inside by means of a handle or an automatic system					
78	Mounted wall mirror, accessible to people of all sizes and abilities					
	Food outlets/restaurants					
79	Buffets height between 850-900 mm. Accessible to all people					
80	Coffee cups and glasses reachable from a wheelchair.					
81	Special meals for people with special dietary requirements					
82	Restaurant accessible by cane users, wheelchair users and people using other assistive devices					
	The Guest Bedroom					
83	No steps or stair cases to the room					

84	Two peepholes in the door, one at the usual height and one at 1200 mm					
85	Wide passage in main entrance (minimum 800 mm)					
86	Wardrobe without doors or with sliding doors					
87	Rail for coat hanger height 1200 mm					
88	Wardrobe shelf accessible from wheelchair					
89	Desk must be accessible by people with all kinds of disabilities					
90	Electrical socket at the desk reachable from a wheelchair					
	Bathroom					
91	Wide passage in door (800 mm).					
92	Handrail on the inside of the door under door opener.					
93	No threshold (ground beam).					
94	Alarm in the bathroom					
95	Safety & Security Manual					
96	Sliding door					
97	Wash basin minimum height 780 mm.					
98	Space under wash basin accessible for wheelchairs.					
99	Single lever basin mixer					
	One soap dispenser standard model “Squeeze” reachable by wheelchair users and the visually impaired.					
100	One soap dispenser “special disable range”, reachable by wheelchair users and the visually impaired.					
101	Towels accessible by people with diverse disabilities					
102	Hairdryer accessible to the visually impaired and					

	wheelchair users					
	Camping site					
103	Availability of an accessible path leading to the camp site					
104	Wide tent platforms at least 1.2meters around the tent					
105	Firm and stable surface designed to allow the use of tent stakes and other means of securing a tent.					
106	Tent platforms should have curbs, walls, railing or projecting surfaces to prevent people from slipping off					
107	Parking spaces at tent campsites at least 4880 mm (16 feet) wide with a slope that does not exceed 1:50 in any direction.					
108	Cooking surface between 380 mm and 865mm (15 to 34 inches) above the ground surface					

INTERVIEW QUESTIONNAIRE FOR NATIONAL PARKS HEADQUARTERS

Section A: Demographics

1. Name of Parks Authority_____
2. Country_____
3. Designation of respondent_____

Section B: Universal accessibility

4. Does your organisation have a universal accessibility policy? Yes ☐ No ☐
   If the answer is no, go to question 7.

5. Is it supported by legislation? Yes ☐ No ☐

6. Is it being implemented in all national parks countrywide?

   Yes ☐ Partly ☐ No ☐

7. Why does your organisation not have a policy on universal accessibility?
   _____
   _____
   _____
   _____
   _____

8. To what extend are national parks in your country universally accessible?
   Lesser extent ☐ Moderate ☐ Greater ☐

9. In your opinion, is it necessary or worthwhile to make national parks universally accessible? Support your answer.
   _____
   _____
   _____
   _____
   _____
   _____

10. Do you think there is sustainable demand for universally accessible National Parks?

    Yes ☐ No ☐

11. Which disability market segment is your priority?
    Mobility ☐ Visual ☐ Hearing ☐ intellectual ☐

12. What challenges are you facing in trying to make national parks universally accessible?

    _____
    _____
    _____
    _____
    _____

13. What do you suggest could be done to make the national parks more universally accessible?

    _____
    _____
    _____
    _____
    _____

    Thank You!

INTERVIEW QUESTIONNAIRE FOR REGIONAL PARK MANAGERS/HOSPITALITY MANAGERS

SECTION A: DEMOGRAPHICS

1. Park Name_____
2. Country_____3. Location (Province)_____
3. Position of Respondent_____
4. Year established_____

SECTION B: UNIVERSAL ACCESSIBILITY

5. Do you have a policy on universal accessibility at this park? Yes ☐ No ☐
6. Who is responsible for its enforcement? _____
7. Is it being fully implemented? Yes ☐ No ☐
8. What legislation governs you in terms of universal accessibility?
   _____
   _____
   _____
9. On average, how many visitors with disabilities do you receive per year?
   None ☐ 1 to 200 ☐ 2001 to 400 ☐ 401 to 600 ☐ 601-800 ☐
   801-1000 ☐ More than 1000 ☐
10. Has the number of arrivals been growing or not? Yes ☐ No ☐

    Can you attribute your answer to the previous question to the accessibility levels of your parks?
    Yes ☐ No ☐
11. Do you view the accessible tourism market as a viable one? Yes ☐ No ☐
12. Which of the following disabilities are common among your tourists?
    Mobility impaired ☐ The blind ☐
    Hearing impaired ☐ Other ☐
13. To what extend is your park universally accessible?
    Very accessible ☐ fairly accessible ☐ Not accessible ☐
14. Identify the specific facilities in this park that are universally accessible
    NB: Can persons with visual, mobility and hearing disabilities use these facilities without difficulties?

Area	**Yes**	**No**
a) Transport to the park		

b) Parking space at the park		
c) Paths to the entrance		
d) Reception area		
e) The bedroom		
f) The toilets		
g) The baths		
h) Trails		
i) Game drives		
j) Game viewing		
k) Bird watching		
l) Water based activities		
m) Restaurants		
n) Transport within the park		
o) Information access		
p) Other areas of the park (please specify		

15. What have you been doing to improve the universal accessibility of your park?

_____
_____
_____
_____
_____

16. Generally what is your opinion on making national parks universally accessible?

_____
_____
_____
_____
_____

17. Given enough funds, would you spend money on making your facilities accessible to people with diverse disabilities? Yes ☐ No ☐

18. If your answer to question 18 is yes, what priority areas would you focus on?

_____
_____
_____
_____
_____

19. What are the major challenges in trying to enhance accessibility in the park?

_____
_____
_____
_____
_____

20. What kind of support would you require in order to make your parks more universally accessible?_____
_____
_____
_____
_____

21. Where do you think your park will be 10years from now in terms of universal accessibility?

_____
_____

OBSERVATION GUIDE FOR ACCESSIBILITY OF NATIONAL PARKS

Park Name_____ Country_____

Date_____ Time_____

Area	Accessible	Inaccessible	Observer's Remarks
Parking			
Path to the reception			
Reception Doorway			
Reception desk			
Walkways/Trails			

Game drive vehicles			
Bird watching hides			
Game viewing platforms			
Restrooms			
Signage			
Water-based activities			
Restaurants			
Bedrooms			
Shower/Bathrooms			
Campsites			

PANEL DISCUSSION QUESTIONS FOR PARENTS OF CHILDREN WITH DISABILITIES (BATSIRANAI CENTRE)

1. What types of disabilities are common among your children?

_____

_____

_____

_____

_____

2. How many have children that are in the school going age?

_____

3. How many of the children in the school going age are actually going to school?

_____

4. When other children at school go for trips, do your children go as well?

_____

4.a. If not,why?_____

_____

_____

5. Do your children like nature?

_____

_____

6. Have you ever taken them outdoors to areas with wildlife?

_____

6.a. If not, why?_____

_____

_____

_____

7. Where did you/ would you want to take your children for nature?_____

_____

_____

_____

8. What challenges do you/are you likely to face when you travel with your children especially to natural areas?

_____

_____

_____

_____

9. Describe how an accessible park should look? Point the features you would expect to find in a universally accessible national park.

_____

_____

_____

_____

_____

_____

10. Any other comments_____

_____

_____

_____

_____

PANEL DISCUSSION QUESTIONS FOR REPRESENTATIVES OF DISABILITY ORGANISATIONS

1. Which organisations do you represent?

i)_____

ii)_____

iii)_____

iv)_____

v)_____

vi)_____

2. Describe the nature of disabilities that your members have.

i)_____

ii)_____

iii)_____

iv)_____

v)

_____

vi)_____

3. How many of you have ever visited national parks?

_____

4. For those who have never visited national parks, what reasons can you give?

5. For those who have been to national parks, what challenges did you face to get there as well as within the park?

6. Generally, to what extent are our national parks accessible to people with different disabilities?

7. On behalf of members of your organisations what do you recommend in order to make our national parks universally accessible? Please recommend on any part of the park.

i)

ii)

iii)

iv)

v)_____

_____

_____

vi)_____

_____

_____

_____

_____

8. If national parks are made universally accessible, do you think the number of visitors with disabilities will increase in national parks?

_____

_____

_____

_____

9. Apart from accessibility issues, what other factors are hindering people with disabilities from visiting national parks?

_____

_____

10. Any other comments_____