




# An exploratory investigation towards a visitor motivational profile at a provincial nature reserve in Gauteng

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**Dates:**

Received: 10 Apr. 2017  
 Accepted: 02 Aug. 2017  
 Published: 26 June 2018

**How to cite this article:**

Muzeza, D., Hermann, U.P. & Khunou, P.S., 2018, 'An exploratory investigation towards a visitor motivational profile at a provincial nature reserve in Gauteng', *South African Journal of Business Management* 49(1), a5.  
<https://doi.org/10.4102/sajbm.v49i1.5>

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This study strives to address the needs of a Gauteng provincial nature reserve in order to develop a greater understanding of the visitors' profile to this reserve in terms of demographics and motivations for visitation. Understanding the motivations for different types of visitors is vital for reserve management to adequately satisfy the visitors' needs. An exploratory factor analysis was used to identify visitor segment profiles based on their motivations for visiting the reserve. The factor analysis revealed six motivation factors. These segments included relaxation and escape; nostalgia and history; personal benefits; wildlife and geographical features; convenience and part of lifestyle; and participating in an event. The study, furthermore, identified, for the first time at a South African provincial nature reserve, a new motivator factor: participating in an event. The results show that segmentation by motivation is a useful research tool for identifying what motivates visitors to travel. Understanding the differences within these segments will help management offer satisfying innovative activities and services to visitors. Recommendations for management include providing opportunities for nature enthusiasts by enhancing awareness creation of the fauna and flora present in the reserve as well as providing opportunities for relaxation and escape through the introduction of recreational facilities such as wellness programmes. Improved amenities are required such as refreshments, curios retail and overnight accommodation. The reserve appeals widely to mountain bikers; thus, marketing efforts should be directed towards this group.

## Introduction

In recent years, there has been a notable increase in environment and nature-based travel which is commonly referred to as nature-based tourism (NBT) (Lim & McAleer 2005). This has also been the trend in the South African tourism industry (Briel 2006). South Africa is a prominent NBT destination because of its scenic landscape, beautiful coastline, diverse wildlife, various game species, wildlife-based attractions and general political stability (Saayman & Du Plessis 2003; Van der Merwe & Saayman 2005).

In South Africa, NBT takes place in national, provincial and local parks and is managed by the government on various levels as well as by the private sector (Kruger & Saayman 2010). On the top tier of government-administered NBT attractions are national parks. South African National Parks (SANParks) is the custodian of 19 national parks which include over 4 million hectares of protected land and biodiversities (SANParks 2014).

On the second tier are provincial nature reserves that are managed under the auspices of provincial governments. Provincial nature reserves in South Africa play an important role in the implementation of biodiversity management and recreation on a more local level when compared with national parks (Department of Environmental Affairs and Tourism 1997). Of the 171 provincial nature reserves in South Africa (Bushell & Eagles 2007), 5 are found in Gauteng and managed by the Gauteng Department of Agriculture and Rural Development (GDARD). These reserves include the Suikerbosrand Nature Reserve (SNR), Abe Bailey Nature Reserve, Alice Glockner Nature Reserve, Roodeplaat Dam Nature Reserve and the Marievale Bird Sanctuary (GDARD 2016).

Research into visitor profiling at NBT destinations has been well documented, especially at national parks. The profiles of visitors to these national parks are primarily motivated by similar factors, although Hermann et al. (2016) state that each of these parks is unique and, as a result,

visitor profiles of these parks should be treated uniquely based on park attributes. Although research into the sphere of national parks is well documented, there is a lack of research into the realm of provincial nature reserves.

The purpose of this article is to establish a visitor profile by determining the demographic profile and main travel motives influencing visitation to the SNR as a provincial nature reserve. An understanding of this profile will contribute towards a greater understanding of motivator drivers of visitors to provincial nature reserves in South Africa. This article will be divided into five parts. Firstly, a literature review is provided, followed by a description of the research methodology utilised. After which the results, conclusions, recommendations and acknowledgements are provided.

## Literature review

Tourism to nature reserves has been identified as one of the fastest growing tourism activities in many countries around the world and South Africa is no exception (Van Heerden 2010). Balmfort et al. (2009) highlight that across southern Africa, NBT now reportedly generates roughly the same revenue as farming, forestry and fisheries put together. This underpins widespread recognition that NBT is an important ecosystem service which can generate funds for financing conservation and economic development.

Nature-based tourism has been identified as a means to develop rural areas and to increase the socio-economic well-being of local communities by reducing poverty (Snyman 2012). However, Snyman (2012) cautions that, although tourism is a vital tool in this regard, it has been known to potentially entrench rather than to reduce poverty. This may be especially relevant to high-end privately operated tourism businesses in NBT settings. The rural areas, where NBT operations may be located, often have limited income-generating and employment activities (Spenceley & Goodwin 2007). Tourism operations should therefore be managed sustainably, and this may be especially significant to NBT offerings in rural areas provided by the public sector such as national and provincial nature reserves.

South Africa boasts of a large number of national parks under the management of SANParks which attract thousands of visitors every year (Kruger & Saayman 2010). However, Kruger and Saayman (2010) further state that these reserves are exposed to stiff competition from privately owned nature parks, provincial nature reserves and surrounding countries, namely Zimbabwe, Namibia and Botswana.

The increase in demand for NBT throughout the world makes it the most rapidly growing sector in the greater tourism industry, although very little market information on nature-based tourists' characteristics, preferences and motivations exist in sub-Saharan Africa. Thus, tourist satisfaction is an essential factor in improving the destination image, attracting more consumption of the tourism product and services, and generating repeat business (Van der Merwe & Saayman 2008).

The Gauteng Provincial Government (2015), for example, has proposed increasing provincial government revenue through the provision of tourism services such as provincial nature reserve entrance fees. This is primarily to decrease the dependency of these reserves on the provincial budget. Thus, the overall effective management of the provincial nature reserve product offering to tourists is imperative to ensure economic sustainability. According to Beh and Bruyere (2007), this triggers the zeal to understand the travel motivations to nature reserves (such as SNR) as this influences development and marketing strategies to these destinations.

Van der Merwe, Slabbert and Saayman (2011) describe tourist motivations as a set of needs that causes a person to partake in a tourist activity. Tourist motivations can be seen as a psychological stimulus that is able to spark the zeal to travel Mahika (2011). Thus, behaviour is seen as a process that aims to satisfy the internal psychological factors of needs and desires, which to some extent can cause tension that must be released through certain actions (Beh & Bruyere 2007).

Tourist motivations at destinations around the globe are well documented in literature. This includes studies on motivations to NBT destinations in southern Africa. The majority of these studies were focussed on national parks and events. However, very little research has been conducted to understand visitor motivations to other NBT products such as provincial nature reserves or private nature reserves. The studies that have been conducted on provincial nature reserves, such as those by Brooks (2005), focussed on reserve, management at Hluhluwe Game Reserve by taking a historical look at tourism. Lindsey et al. (2007) analysed the wildlife viewing preferences of visitors at provincial parks, but this study does not address profiling or motivation. Joubert and Mabunda (2007) provide an insight into visitor decisions to visit wilderness areas, but no clear indication is provided if these areas are indeed national, provincial, local or private. Because of the limited nature of research into this field, this study will delve into research conducted at other NBT destinations in terms of understanding travel motivations.

If planners and managers accept the NBT market and travel motivations of the different segments, they would be more aware of their implications in managing reserve visitors, and would develop appropriate tourism planning and marketing strategies (Marques, Reis & Menezes 2010). Lamb, Hair and McDaniel (2004) have indicated that a thorough understanding of a market profile should benefit the effective promotion of a tourist product and thus effective marketing. Tourist typologies are useful in tourism planning only to the extent that they reflect tourist behaviour and the level of discomfort they bring to the receiving system (Benxiang 2013). Thus, an analysis of the demographic profile of nature-based tourists can benefit tourism marketers, especially with regard to market segmentation, product development, service quality evaluation, image development and promotional activities (Kruger, Viljoen & Saayman 2016).

One form of tourism typology is through an analysis of visitor motivation. According to Meng, Tepanon and Uysal (2006),

motivation is regarded as a combination of needs and desires that initiates the inclination to travel in a general sense which can also differ relating to demographic variables such as age, gender and nationality of tourists. Meng et al. (2006) further highlight that, although many factors influencing tourist motivations exist, motivations are still crucial in answering what motivates visitors to visit nature reserves. Effective management of visitor service provision is only realised after the understanding of visitors' travel motivations (Kruger, Saayman & Hermann 2014; Van der Merwe et al. 2011). Zhang and Marcussen (2007:18) note that understanding tourism motivations and activities will not only help tourism providers improve their products and services, but also know exactly what their customers want and where they are coming from. Mahika (2011:1) supports this idea when he states that, in order to survive the stiff competition in the NBT system, tourism planners and managers need to know and focus on the changes that affect the motivations of tourists to buy tourism products and services.

Van der Merwe et al. (2011) state that different tourist attractions lead to different motives. This may be owing to the unique nature of each destination (Hermann et al. 2016). In view of this, different researchers have found both dissimilar and similar market segments in their respective studies. The following are a few examples: Beh and Bruyere (2007) found three visitor segments which are escapists, learners and spiritualists; Van der Merwe and Saayman (2008) identified six travel motives in their study which include nature, activities, attractions, nostalgia, novelty and escape; and Van der Merwe et al. (2011) revealed four visitor segments, namely destination attractiveness, escape and relaxation, time utilisation and personal attachment.

According to Kruger and Saayman (2010), the results of the above-mentioned researchers are further not easily comparable and this highlights the fact that different visitors to different nature reserves may have quite different motives. Kruger and Saayman (2010) further highlight that the difference could be because of what the park offers, its location, activities offered and the type of market for the park and therefore each nature reserve is unique. Table 1 illustrates past research findings on tourists' travel motives.

According to Kruger and Saayman (2010), tourists have different travel motives to different attractions. Table 1 indicates that, in line with this thought, it is clear that motives such as escape, relaxation and novelty, are common in most studies which have delved into NBT motivations in southern Africa. In addition to the literature on motivations, the studies of Van der Merwe and Saayman (2008), Kruger and Saayman (2010), Kruger and Saayman (2010), Kruger et al. (2014) and Hermann et al. (2016) also found high levels of visitation to these national parks from source markets outside of the province in which the reserves are situated; thus indicating that these reserves appeal highly towards domestic and international tourist markets. However, it is evident that there is a gap in research with regard to travel motivations to

**TABLE 1:** Summary of travel motivations at nature-based tourism attractions in Southern Africa.

Researchers	Location	Travel motives
Beh and Bruyere (2007)	Samburu, Buffalo Springs and Shaba National Reserves in Kenya	<ul style="list-style-type: none"> <li>• Escapists</li> <li>• Learners</li> <li>• Spiritualists</li> </ul>
Van der Merwe and Saayman (2008)	Kruger National Park	<ul style="list-style-type: none"> <li>• Nature activities</li> <li>• Attractions</li> <li>• Nostalgia</li> <li>• Novelty</li> <li>• Escape from routine</li> </ul>
Kruger and Saayman (2010)	Kruger National Park and Tsitsikamma National Park	<ul style="list-style-type: none"> <li>• Group togetherness</li> <li>• Escape</li> <li>• Cultural exploration</li> <li>• Event novelty</li> <li>• Unexpectedness</li> <li>• Group socialisation</li> </ul>
Saayman, Slabbert and Van der Merwe (2009)	Jeffreys Bay and Hartenbos	<ul style="list-style-type: none"> <li>• Escape</li> <li>• Relaxation</li> <li>• Destination attractiveness</li> <li>• Personal attachment</li> <li>• Site attractiveness</li> <li>• Leisure activities</li> <li>• Novelty</li> <li>• Socialisation</li> <li>• Trip features</li> </ul>
Kruger and Saayman (2010)	Tsitsikamma National Park	<ul style="list-style-type: none"> <li>• Escape from city life</li> <li>• Relaxation</li> <li>• Knowledge seeking</li> <li>• Nostalgia</li> <li>• Park attributes</li> <li>• Activities</li> <li>• Novelty</li> <li>• Nature experience</li> <li>• Photography</li> </ul>
Van der Merwe et al. (2011)	Hartenbos, Jeffreys Bay, Margate, Amanzimtoti and Plettenberg Bay	<ul style="list-style-type: none"> <li>• Destination attractiveness</li> <li>• Escape and relaxation</li> <li>• Time utilisation</li> <li>• Personal attachments</li> </ul>
Scholtz, Kruger and Saayman (2013)	Kruger National Park	<ul style="list-style-type: none"> <li>• Escape</li> <li>• Wildlife experience</li> <li>• Family benefits</li> <li>• Finances</li> <li>• Socialising and exploring</li> <li>• Loyalty</li> </ul>
Rid, Ezeuduj and Pröbstl-Haider (2014)	Rural Gambia	<ul style="list-style-type: none"> <li>• Heritage and nature</li> <li>• Authentic rural experience</li> <li>• Learning</li> <li>• Sun and beach</li> </ul>
Hermann and Du Plessis (2014)	National Zoological Gardens of South Africa	<ul style="list-style-type: none"> <li>• Exploration of self</li> <li>• Children and conservation</li> <li>• Enhancement of relationships</li> <li>• Education and learning</li> <li>• Nature experience seekers</li> <li>• Escape</li> <li>• Novelty</li> </ul>
Kruger et al. (2014)	Kruger National Park	<ul style="list-style-type: none"> <li>• Knowledge seeking</li> <li>• Escape</li> <li>• Park attributes</li> <li>• Group affiliation</li> <li>• Exploration</li> </ul>
Saayman and Dieske (2015)	Kgalagadi Transfrontier Park	<ul style="list-style-type: none"> <li>• Park attributes</li> <li>• Escape</li> <li>• Education and recreation</li> <li>• Exploration</li> </ul>
Hermann et al. (2016)	Mapungubwe National Park	<ul style="list-style-type: none"> <li>• Heritage and educational attributes</li> <li>• Escape and relaxation</li> <li>• Experience nature</li> <li>• Park attributes</li> </ul>
Kruger et al. (2016)	Kruger National Park	<ul style="list-style-type: none"> <li>• Escape</li> <li>• Lifestyle</li> <li>• Comprehensive family destination</li> <li>• Affordability</li> </ul>

other NBT destinations such as provincial, local and private nature reserves.

Provincial nature reserves have the potential to assist in the development of economic activities, to support the development of rural areas and thus promote poverty alleviation through tourism. However, in order for tourism to be developed in such areas, a clear understanding of visitors is vital so that the products offered are managed in

an appropriate way to meet the needs of a chosen target market. The problem that exists in this sphere, however, is a lack of market research focussed on understanding the NBT consumer in the niche market of provincial nature reserves. Suikerbosrand Nature Reserve is one such provincial nature reserve, which is situated outside of the major urban areas, which the province of Gauteng is known for.

## Overview of Suikerbosrand Nature Reserve

The SNR was proclaimed on 27 March 1974 and is located near Heidelberg in Gauteng. Suikerbosrand Nature Reserve serves as a contributor to environmental education, resource management of natural habitats with traverse valleys and grass plains as well as recreation and tourist facilities (Olivier & Olivier 2003). The reserve plays host to gorges, grasslands and kloofs, and many game species which include zebra, brown hyena, mountain reedbuck, black wildebeest, red hartebeest as well as 200 bird species (Olivier & Olivier 2003). The reserve is popular with hikers and cyclists. Suikerbosrand Nature Reserve received a total of 41 222 day visitors and 3903 overnight visitors during the period 2007–2008, and it is believed that the numbers will continue to increase (GDARD 2008). Suikerbosrand Nature Reserve, as a provincial nature reserve, has experienced a steady increase in the number of visitors since 2008 to date (GDARD 2008). Despite the great strides in luring more tourists, SNR was closed for a year owing to water problems (GDARD 2016). The park was reopened in 2016 to visitors (GDARD 2016).

## Research methodology

This study adopted an exploratory, quantitative research approach through a survey research design. This research methodology section will delve into the research design, population and sampling, data analysis and ethics.

A structured questionnaire, which was developed based on similar past studies regarding segmentation by visitor motivation at other NBT destinations, was utilised. These previous studies by Beh and Bruyere (2007), Kruger and Saayman (2013), Hermann and Du Plessis (2014) and Kruger et al. (2014) were proved reliable and thus deemed suitable

The questionnaire consisted of two parts: Section A asked for the demographic details of respondents (gender, age, home language, marital status, group size, level of education, estimated annual gross income, decision to visit the reserve, transport used, number of visits and media preferred); and Section B focussed on visit motivations. The motivation variables were tested with a Likert scale where 1 = *not important at all*, 2 = *less important*, 3 = *important*, 4 = *very important* and 5 = *extremely important*. The questionnaires were given to visitors at the reserve entrance and collected when the visitors departed from the reserve.

All day visitors to the SNR formed part of the sample during the survey period (mid-November 2015 to mid-January 2016). In order to obtain a representative sample, selected week days and weekend days were chosen for fieldwork. Trained fieldworkers distributed the questionnaires by means of convenience sampling. One person per group was invited to participate in the survey. A total of 362 completed questionnaires were received and included in the analysis.

Microsoft Excel was used for data capturing, while the Statistical Package for the Social Sciences (SPSS) version 23 was used for data analysis. To test the reliability of data, a reliability test, by means of Cronbach's Alpha, was utilised. All variables scored Cronbach Alpha scores of 0.8 or above which, according to Field (2009), are reliable and useable for analysis. Descriptive statistics were used through frequencies and means to analyse the demographic profile of participants. Visitor motivator factors were analysed, using descriptive statistics as well as an exploratory factor analysis. An exploratory factor analysis used as data analysis was conducted on a new, untested questionnaire. For the factor analysis, a pattern matrix, which used the principal axis factoring extraction method, was used on the 25 variables relating to visitor motivations.

Participants were provided with a questionnaire and a letter of informed consent. In addition, fieldworkers also introduced the study to all participants. This informed consent letter introduced the study and described how the input of respondents will assist in better understanding the consumer market at SNR. All respondents participated in the study voluntarily and were free to exit the survey at any time. All returned questionnaires were anonymous and no information was obtained that could identify respondents.

## Results

### Respondent profile

Table 2 provides an overview of the demographic profile of the respondents. The respondents were predominantly male, in the age group of 18–31 years, mostly single and from Gauteng followed by KwaZulu-Natal and Mpumalanga. Most of the respondents were English speakers followed by Afrikaans speakers and they were primarily repeat visitors (having visited the reserve approximately 10 times in the past 3 years). Respondents were generally well-educated, as they possessed diploma or degree qualifications and earned a relatively high gross annual income of between R305 001 and R431 000.

The respondents preferred to travel in groups of seven people (Mean = 7) using their own private cars (especially sedans) when visiting the reserve. Most of the respondents took a spontaneous decision to visit SNR which implies that they did not plan long in advance for their trip. These findings differ considerably from findings of earlier studies by Saayman and Slabbert (2004), Van der Merwe and Saayman (2008), and Kruger et al. (2014) who found that visitors to



**TABLE 2:** Demographic profile of respondents.

Category	Profile	%
Respondent gender	Male	54
	Female	46
Age	18–30	40
	31–40	32
	41–50	17
	51–60	4
	61–70	2
	71 and above	5
Language spoken	English	60
	Afrikaans	29
	Southern Sotho	4
	Northern Sotho	4
	Ndebele	1
	Other	2
Marital status	Single	51
	Married	37
	Cohabiting	7
	Divorced	3
	Widowed	2
Place of residence	Gauteng	50
	KwaZulu-Natal	19
	Mpumalanga	8
	Eastern Cape	5
	Free State	4
	Northern Cape	4
	Limpopo	3
	Western Cape	3
	North West	2
Level of education	No school	4
	High school	10
	Diploma/degree	37
	Postgraduate	14
	Professional	35
Estimated annual gross income	Less than R20 000	15
	R200 001–R140 000	14
	R140 001–R221 000	12
	R221 001–R305 000	21
	R305 001–R431 000	32
	R431 001–R552 000	4
When was the decision to visit the reserve made?	Spontaneously	57
	The same week	18
	Within the last month	10
	More than a month ago	15
Media preference	Website	48
	Family and friends	28
	Television	5.8
	Exhibitions and shows	4
	Previous visit	3
	Facebook	3

national parks are generally older. However, the findings are similar to the findings of Rid et al. (2014) in terms of age.

Respondents were requested to indicate through which media channel they last heard about SNR. Results in this regard outline that nearly one-half of the visitors to SNR learnt about the reserve through the SNR website, while family and friends had recommended SNR to 28% of the visitors. Only 3% of visitors were familiar with the reserve as a result of a previous visit; thus potentially indicating low repeat visitation.

## Results of factor analysis

An exploratory factor analysis was conducted on the 25 constructs related to visitor motivations. The Bartlett's test of specificity indicated that factors yielded  $p < 0.001$  which notes that the correlation structure is valid for a factor analysis of the collected data. A total of six factors were identified, accounting for 72% of total variance. The Oblimin rotation method and a pattern matrix with the principal axis factoring extraction method were used on the different constructs in their groupings. Thereafter, the factor labels were realised by analysing the common themes underlying the constructs within each factor. The groupings included *nostalgia and history, personal benefits, relaxation and escape, wildlife and geographical features, convenience and part of lifestyle* as well as *participating in an event*. Field (2009) states that a Kaiser-Meyer-Olkin Measure (KMO) of sampling Adequacy statistic of between 0.7 and 0.8 is good, while a KMO statistic of 0.8 to 0.9 is great and a KMO statistic of above 0.9 is excellent. The KMO for this factor analysis was 0.83; thus, it is great in terms of its reliability. This is important as the KMO statistic of every factor will indicate that the patterns of correlation are compact and should bring out distinct and reliable factors. KMO statistics for this factor analysis were all above 0.752.

Six factors were extracted and each will be discussed. The factors are arranged from the highest to the lowest in terms of mean scores.

### Factor 1: Wildlife and geographical features

This factor received the highest mean score (3.56) and is therefore, the main motivator for visitors to SNR. It included the following themes: to view wildlife; value for money; preference of the reserve for its geographical features; and to go hiking. This factor was also identified by numerous past studies as a crucial motivator factor for nature parks in South Africa (Hermann et al. 2016; Kruger & Saayman 2010); Saayman & Slabbert 2004; Van der Merwe & Saayman 2008). Thus, wildlife and geographic features in a provincial reserve such as SNR appeal on the same level to visitors as in the case of a national park.

### Factor 2: Relaxation and escape

This factor received the second highest mean score (3.54). It included the following themes: to escape from my routine; to relax; to explore a new destination; and to spend time with family and friends. This is one of the most common motivator factors to visit national parks and was also identified by Beh and Bruyere (2007), Hermann et al. (2016) Kruger et al. (2016), Kruger and Saayman (2010), Saayman and Slabbert (2004) and Van der Merwe and Saayman (2008).

### Factor 3: Participating in activities and health

The third factor that was identified as a main motivator factor to SNR visitors included the following themes: birding; cycling for leisure; cycling for training; to participate in an event; and for health reasons. This factor was identified as a

new motivator factor for visiting nature reserves in South Africa. The previous studies, listed in Tables 2 and 3, had not identified this motivator factor as a main contributor to motivation. Participating in events in NBT attractions have generally achieved meagre scores in previous studies such as Hermann et al. (2016).

#### Factor 4: Personal benefits

The factor, personal benefits, with the fourth highest mean of 3.38 included the following themes: for the benefit of my children; visiting for educational reasons; photography; and spiritual experience. There is a remarkable number of past research studies that identified education as a main motivator for visiting national parks or reserves in South Africa and internationally (Beh & Bruyere 2007; Hermann et al. 2016; Kruger & Saayman 2010; Saayman & Slabbert 2004; Van der Merwe et al. 2011).

#### Factor 5: History and reminiscence

The factor of history and reminiscence with a mean score of 3.36 was identified as the fifth highest main motivator to visit SNR. Remarkably, it included the themes nostalgia as well as experiencing a new destination. This may seem contradictory. However, a visitor may through nostalgia from a previous experience at another attraction want to explore SNR as a new attraction. This factor also included the construct

of learning about history (heritage). This factor has been identified as a main motivator factor in previous studies (Hermann et al. 2016; Kruger & Saayman 2010; Saayman & Slabbert 2004; Van der Merwe et al. 2011).

#### Factor 6: Convenience and part of lifestyle

The factor of convenience and part of lifestyle had the lowest mean score of 3.33 as well as the lowest overall factor loadings (all below 0.2). It therefore has the lowest influence in terms of visitor decision-making. This factor included the following themes: it is part of my lifestyle; convenient and close to where I live; to see unique plants at the reserve; to picnic; and to spend time outdoors. This factor was also identified by Kruger et al. (2016).

## Discussion and recommendations

The SNR is the largest provincial game reserve in Gauteng, and it provides essential preservation of biodiversity and natural landscapes as well as recreational facilities to visitors. Although the reserve has seen a growth in visitor numbers, not much is known about the profile and key motives for visitation to this reserve or other provincial nature reserves in South Africa. Based on the fact that provincial government financial support has decreased in recent years, NBT attractions must look for ways of subsidising their own operations. Hence, SNR must generate more income through entrance fees and visitor spending at the reserve. To achieve this, it is essential for SNR to recognise its visitor profile and why the visitors travel to the reserve so as to effectively offer satisfactory products and services to the visitors. Although research focussing on visitor motivations has been well documented in national parks and other tourism attractions in South Africa and globally, there is minimal research on both provincial and local nature reserves.

In terms of the demographic findings of this study, most of the respondents were English and Afrikaans speakers; thus, marketing material, signage and communication should focus on these two language groups in order to maintain this current market. In order to grow new markets, efforts should also be made to initiate marketing communication towards developing markets such as Sesotho.

Most respondents are well-educated and would be considered medium- to high-income earners. These visitors would have a greater propensity to travel and, as a lucrative segment, efforts should be made to maintain this market share. In addition, as the reserve is a provincial reserve, more effort should be made to attract a more overall representative demographic to the reserve such as school groups and lower income groups. It is recommended that the SNR should focus their marketing initiatives on the youth who form the majority of the visitors to the reserve in order to grow the market base. It is also recommended that older age groups who have more time and money to spend should also be enticed to visit the reserve, as this could ease the possible capacity issues during weekends by attracting visitors during weekdays. The SNR could accomplish this

**TABLE 3:** Results of factor analysis.

Variable	Factor loading	Mean value	Reliability coefficient
<b>Factor 1: Wildlife and geographical features</b>	-	<b>3.56</b>	<b>0.850</b>
To view wildlife	-0.4102	-	-
It is value for money	-0.5370	-	-
I prefer the reserve for its geographical features	-0.5702	-	-
To go hiking	-0.4284	-	-
<b>Factor 2: Relaxation and escape</b>	-	<b>3.54</b>	<b>0.905</b>
To get away from my routine	-0.2536	-	-
To relax	-0.3147	-	-
To explore a new destination	-0.2422	-	-
To spend time with family and friends	-0.2532	-	-
<b>Factor 3: Activities and health</b>	-	<b>3.41</b>	<b>0.752</b>
To do birding	0.5267	-	-
Cycling for leisure	0.3394	-	-
Cycling for training	0.4084	-	-
To participate in an event	0.3871	-	-
For health reasons	0.3261	-	-
<b>Factor 4: Personal benefits</b>	-	<b>3.38</b>	<b>0.839</b>
For the benefit of my children	-0.4275	-	-
Primarily for educational reasons	-0.3263	-	-
For photography	-0.2158	-	-
It is a spiritual experience	-0.2420	-	-
<b>Factor 5: History and reminiscence</b>	-	<b>3.36</b>	<b>0.826</b>
To remind me of my childhood	0.5253	-	-
To experience a new attraction	0.5334	-	-
To learn about history	0.5574	-	-
<b>Factor 6: Convenience and lifestyle</b>	-	<b>3.33</b>	<b>0.872</b>
It is part of my lifestyle	0.0515	-	-
It is convenient and close to where I live	-0.0103	-	-
To see the unique plants at the reserve	-0.1301	-	-
To picnic	-0.1223	-	-
To spend time outdoors	0.0002	-	-

through the provision of discretionary entrance fees such as loyalty programmes that will entice repeat visitation or combination tickets for larger groups and families where discounts are provided to groups and children.

Many respondents took a spontaneous decision to visit SNR which can be because of the proximity of the reserve to them, as most of the respondents were from Gauteng. Thus, the reserve appeals primarily to provincial residents and less to visitors from further afield. Although this study did not address visitor spending, past studies indicated that spending is higher among repeat visitors that plan their trips well in advance (Kruger et al. 2014). This once again reiterates the importance to entice repeat visitation and attracting intra-provincial and international tourists, as currently, SNR has low repeat visitation. This could be done through the provision of guest amenities such as improved accommodation options or advanced booking for facilities such as selected hiking or mountain biking trails. Participating in an event is a newly identified motivator for visitors to nature reserves in South Africa, when compared to previous research, as indicated in the literature and as summarised in Table 1. Therefore, SNR must market the reserve as a venue for events such as birding events and cycling competitions. Events could also be used as a tool to improve visitation through promotions that encourage tourists from other provinces and further afield to visit the reserve. This could be done through the hosting of national and international events and national marketing campaigns.

In terms of marketing, many respondents heard about the reserve through SNR's website and through family and friends, and not through repeat visitation. Hence, SNR management must make use of these two media of communication and also advertise the reserve through other media such as radio, social media and publications. The latter should include birding, biking and hiking magazines that will appeal to the visitor profile and enable them to reach a larger audience. Reaching a larger audience means increasing visitation numbers, and improved visitation translates to a successful marketing campaign as described by Lamb et al. (2004).

As wildlife and geographical features motivate tourists to visit the reserve, it is recommended that the SNR should provide visitors with opportunities for learning about the ecosystems, and fauna and flora present in the reserve. As this is not a Big Five, this will enhance what is currently on offer. Many respondents highlighted that they visited SNR for relaxation and escape. Hence, SNR management must provide opportunities for tourists to relax at the reserve. They can do this by providing more recreational facilities such as wellness facilities and swimming pools, shops for refreshments and curios, and offering multiple accommodation options for overnight visitors.

In conclusion, the SNR may be considered purely a provincial reserve in terms of its visitor profile when compared to national parks. Its visitor profile compares soundly with other

visitor profiles at national parks. However, there are differences that relate to the location of the visitor market which are more local, visitors are mostly young and visitors plan their trips on a short-term basis when compared to national park visitors. Participation in events is a new motivator which distinguishes the SNR from national parks, perhaps because events such as cycling are often prohibited or offered in restricted circumstances at national parks owing to the presence of dangerous fauna in national parks. Suikerbosrand Nature Reserve possesses numerous hiking and cycling trails within the reserve with free-roaming wildlife which do not pose a threat to visitors. Suikerbosrand Nature Reserve should capitalise on this motivator factor as it provides the reserve with a strategic differentiation and competitive advantage. As Gauteng is the source market for many NBT destinations in southern Africa, the SNR should galvanise its resources to not only grow its appeal nationally and internationally, but also to maintain and grow its appeal provincially, as its current source market may provide a sustainable market base. As this study provided a foundational investigation into the dynamics of tourism at provincial nature reserves, it is recommended that further research into visitor profiling at other provincial, local and private nature reserves should be conducted, especially in areas such as visitor satisfaction, competitiveness and visitor management.

## Acknowledgements

The authors thank the following people for participation in and support of this study: Mr Daniel Keon (Biodiversity Officer) at SNR, Mr Andries Ndlandla for helping with the distribution and collection of the survey questionnaires to and from the participants at SNR. Above all, the authors would like to thank the respondents who participated in the survey.

## Competing interests

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

## Authors' contributions

D.M. conceptualised the research study, completed the literature review, developed the questionnaire and conducted the fieldwork. D.M. through consultation with the Statistical Consultation Services at Tshwane University of Technology completed the results section. U.H. provided supervisory input towards the research project and contributed towards the discussion and recommendations section. P.K. provided supervisory assistance.

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