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Expenditure-based segmentation of tourists to the Kruger National Park

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Although expenditure-based segmentation is a popular method, it has never previously been applied in the study of national parks in South Africa. The advantage of this method is that one can distinguish between different levels of expenditure markets. This article aims to apply expenditure-based segmentation of tourists to the Kruger National Park in South Africa. Only tourists per definition formed part of this study, excluding day visitors. Tourist surveys were conducted between 2001 and 2007, yielding 2904 completed questionnaires.

Bestedingsgebaseerde segmentering van toeriste aan Kruger Nasionale Park

Alhoewel segmentering op grond van bestedingspatrone 'n gewilde metode is, is dit nog nooit voorheen toegepas in die studie van nasionale parke in Suid-Afrika nie. Die voordeel van hierdie metode is dat dit onderskeiding tussen verskillende vlakke van bestedingsmarkte moontlik maak. Die doel van hierdie artikel is daarom om bestedingsgebaseerde segmentering van toeriste toe te pas op die Kruger Nasionale Park in Suid-Afrika. Slegs toeriste per definisie het deel gevorm van hierdie studie, en dagbesoekers is uitgesluit. Toeristepeilings is tussen 2001 en 2007 onderneem en het 2904 voltooide vraelyste opgelewer.

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The Kruger National Park was formally established in 1926 with the amalgamation of the Sabi and Singwitsi Game Reserves. The reason behind the establishment of the Park was to prevent uncontrolled hunting in this area, with the main purpose of conservation. However, even at the time of the proclamation of the Kruger National Park in 1926, the idea of tourism was already well-established (Pienaar 2007). Currently the Kruger Park, in addition to playing an important conservation role, is viewed as a major economic influence in the region, creating jobs and attracting valuable tourism revenue. Saayman & Saayman (2006b: 67) showed that the Kruger National Park generated approximately R1.5 billion for the region annually. This park now forms part of the Greater Limpopo Transfrontier Park, which includes conservation areas in South Africa, Mozambique and Zimbabwe, thus forming one of the largest protected natural areas in the world (SANParks 2007).

For both overseas and local tourists, scenic beauty and wildlife remain the major tourism attractions (ecotourism) that South Africa has to offer (Burger 1998: 147 & 2008: 523). Unfortunately, South Africa is one of many countries or destinations worldwide that offer this type of tourism product. Hence, it is of paramount importance to ensure that resources are used both effectively and efficiently. This article aims to apply expenditure-based segmentation of tourists to the Kruger National Park (KNP) in South Africa.

1. Literature review

The purpose of market segmentation is to divide a heterogeneous market into homogeneous subgroups with regard to one or more of a number of variables by means of different statistical procedures (Sarbacia & Munuera 1994: 111-24). Marx & Van der Walt (1989) add that market segmentation is a means of defining and targeting specific markets. It is the process of dividing a market into a specific group of buyers that require different products or marketing mixes.

The task of identifying a segment can be difficult, partly because there are various bases that can be used, including demographic, psychographic, geographic, socio-economic and/or benefit information.

These bases need to be evaluated on a foundation of an ability to identify segments for which different strategies are pursued (Aaker 1998). The division (segmentation) of the markets can be undertaken in various ways. Marketing strategies may use one of the segmentation bases or a combination of the following approaches to segment the market (cf Table 1).

The reasons for undertaking market segmentation include recognising tourists' differences as one of the keys to successful marketing, as it can lead to a closer matching of tourists' needs with the destination's products and services (Stanton *et al* 1991).

In addition, segmentation can lead to:

- niche marketing where the destination can meet most of, or all the needs of tourists in that niche segment (Saayman 2006);
- a concentration of resources in markets where the competitive advantage is the greatest and returns are the highest (Strydom *et al* 2000);
- a competitive advantage by considering a market different to that of one's competitors (Nickels & Wood 1997);
- marketing the destination as a speciality in the chosen market segments (McDonald & Dunbar 1995);
- establishing a long-term relationship with a specific tourist group (Nickels & Wood 1997, Perreault & McCarthy 1999);
- designed products responsive to meet the needs of the market place (Semenik 2002);
- effective and cost-efficient promotional tactics and campaigns (George 2001);
- the proper allocation and use of marketing resources (Strydom *et al* 2000), and
- more effective use of scarce resources (Saayman 2006). It should also be noted that proper segmentation could help in gauging the destination's market position and its image as a competitive destination.

Table 1: Variables of segmentation

Variables of segmentation	Definition of variable	Subcategories
Demographic	Dividing the markets into groups based on demographic bases. Demographics are the most popular bases for segmentation	Gender Age Family life cycle Religion Family size
Geographic	Relating to geographical distribution. This is dividing the market into units such as cities, states, and neighbourhoods. Markets can be divided into three categories: Primary markets Secondary markets Tertiary markets	Region Country City Suburb Climate Transportation Population density
Psychographic	Dividing tourists into different groups based on their social class, life style and/or personality characteristics	Personality type Conservative Compulsive Ambitious
Behavioural segmentation	Behavioural segmentation divides the population on the reasons for their actions	Desire for benefits Attitudes Knowledge Purchasing occasions User status Attributes towards offerings: Loyalty Economic considerations Facility considerations Retailer loyalty Brand loyalty Confidence in trademark
Expenditure-based	Expenditure based segmentation divides the market in different spending segments	High spenders Medium spenders Low spenders

Sources: Burke & Resnick 1999, Lubbe 2000, Saayman 2006, George 2004, Kotler & Armstrong 2004, Lamb *et al* 2004, Proctor 1996

It is clear from the above that one needs to seek market segmentation due to the fact that the market can no longer be served in a wholesale fashion. By concentrating on a single segment, or a number of segments, marketing efforts can be coordinated more efficiently (Slabbert & Saayman 2004: 2, Kinnear *et al* 1995). Segments are evaluated according to a number of criteria, but for tourism the essence of the approach is to identify the most relevant characteristics of tourists seeking particular sets of benefits from their tourism and leisure purchases (Laws 1997).

Once marketing strategists have identified specific market segments they can tailor the product or service and promote the product or service more effectively. Each group (segment) can be targeted and reached with a distinct marketing mix (McDonald & Dunbar 1995). Communication effects have a direct bearing on the prospective tourist's decision to act. The prospective tourist decides whether to respond to the advertisement by taking action (Pritchard 1998). To be of use, markets need to be segmented according to attributes that can relate to the product or service, distribution, price and media (Anderneck & Caldwell 1994: 40-6). It could also be useful to understand broad reasons or motivations for expenditure.

According to Craggs & Schofield (2006), a wide range of variables influence visitor expenditure. Godbey & Graefe (1991: 213) found that tourists attending football matches show a strong negative relationship between per game expenditure and repeat visitation. They found that those who attended one game spent three times as much as those attending all or most of the games. Opperman (1997: 178) found that repeat visitors had lower travel expenditure per day compared to first-time visitors, while Gyte & Phelps (1989) found the exact opposite. Jang *et al* (2004) concluded that frequency of visitation influences visitor expenditure. Saayman & Saayman (2006a: 36) found that distance travelled and location play an important role in the spending of visitors at arts festivals in South Africa. From this, the latter were able to distinguish between high and low spenders.

Various other studies have segmented the tourist market into different expenditure groups.¹

In research on tourists visiting South Africa Saayman *et al* (2000) found that different markets (tourists from different countries) have different spending patterns. From their study, they could distinguish between high- and low-spending foreign markets. Mok & Iverson (2000: 299) used travel expenditure as a segmentation variable in their study of Taiwanese travellers to Guam. They categorised spenders into three categories, namely light, medium, and heavy, based on their total expenditure. However, the expenditures of heavy spenders accounted for 50% of the expenditures of the entire sample while the expenditures of light and medium spenders represented 20% and 30% of the total, respectively (Mok & Iverson 2000: 302). Craggs & Schofield (2006) used a similar approach to that of Mok & Iverson (2000: 302) but added a fourth category namely light, medium, heavy and no expenditure. They used expenditure-based segmentation in their study of visitors to the Quays in Salford in the UK. Yet another study, conducted by Pilar & Rosario (2006), used four categories, namely low, medium, high and very high in determining expenditure-based segmentation of tourists to the province of Seville in Spain.

Based on the literature review, this is the first time that expenditure-based segmentation will be done in a national park in South Africa. The reasons for using expenditure as a basis for segmentation are as follows: to understand tourist spending behaviour, and the factors affecting such behaviour. Understanding expenditure patterns and activities are key to the strategic planning of facilities and amenities in order to be financially sustainable. Research also indicated that in a competitive business environment, marketers need to expand market share and that the focus is on tourists who spend more, since it has a greater economic impact. In conclusion, Spotts & Mahoney (1991) stated that the travel expenditure is superior to an activity segmentation variable because travel expenditures for a given unit of travel activity can vary significantly from one travel party to another.

1 Cf Legoharel 1998, Spotts & Mahoney 1991, Mok & Lam 1997, Saayman *et al* 2000; Mok & Iverson 2000, Pilar & Rosario 2006, Craggs & Schofield 2006.

2. Research method

Since the data used in the analysis were gathered over a period of 7 years (from 2001 to 2007), using consumer-based questionnaires, the methodology used will be discussed under the following headings: the questionnaire, the samples, and the method.

2.1 Questionnaire

The questionnaire used to survey visitors to the Kruger National Park remained similar throughout the period of data collection (2001-2007) and consists of three sections. Section A surveyed demographic details (marital status, age and province of origin) while section B focused on spending behaviour and motivational factors (number of persons paid, time visited the park, length of stay and amount spend on accommodation, transport, food and beverages, souvenirs and entrance fee). Section C comprised more detailed information on the consumers' general behaviour (type of magazines/newspapers they read and catering preferences). For the purposes of this article, the information obtained in sections A and B are predominantly used. The authors of this article developed a list of possible reasons/motivations for visiting the Kruger National Park. Participants then rated these reasons/motivations on a 5-point scale from not at all important to extremely important.

2.2 Samples

Surveys were conducted annually between 2001 and 2005. Since 2006, surveys were conducted bi-annually, in winter and in summer. Table 2 lists the sample sizes and the different camps where the surveys were conducted; it is evident that the sample size has grown significantly over the past years. All visitors to the camp received a questionnaire which they completed in their own time. Field workers collected the questionnaires during the evenings or early mornings.

It is difficult to determine whether the sample is representative of the population, since national parks do not have clear data on the characteristics of the visitors to the Park, except for the surveys reported in this instance. Yet, it is generally accepted that most

visitors to the park are South Africans, while foreigners are relatively less in absolute numbers. This is also reflected in the sample, where the highest number of total annual foreign visitors is 14.7%. Table 2 also indicates the total number of visitors to the Kruger National Park during each year. This number includes both overnight and day visitors.² To have a better idea of the proportion of overnight visitors, the unit nights sold (including camping nights) are also indicated. Again, this is an approximation, since most visitors stay more than one night (3.5 nights on average for the period 2001-2007). If the unit nights sold are divided by the average nights spent in the park, it may give an approximation of the overnight travel parties during one year. If this number is equally divided by the 12 months, the visitor groups per month can be “guesstimated”.

Only questionnaires that had complete spending information and indicated the number of people in the travel party could be used in the final analysis. This caused a slight decline in the final responses, which are also indicated in Table 2. While there are also missing values in the other questionnaires, as many questionnaires as possible were included in the analysis.

3. Method

First, information was available for total expenditure and number of people in the group. By dividing the former by the latter, a total average amount spent per person could be deduced. In order to account for inflation, the total expenditure per person was adjusted per year group. Thus, with the year 2000 as reference category, each subsequent year's total expenditure was adjusted with the annual South African inflation, as reflected in the Consumer Price Index (CPIX). Expenditure for individuals was also calculated after subtracting travel expenses, since this might have skewed the data (for instance, those who travel further to get to the park naturally spend more). Some descriptive characteristics of the visitors are also presented in Table 2.

2 Note that the strict definition of tourism is applied for the purposes of this research and therefore only overnight visitors are considered in the analyses.

Table 2: Total number of questionnaires completed (2001-2007)

Year	2001	2002	2003	2004	2005	2006	2006	2006	2007
Survey month	May	July	December	December	December	July	July	November	June
Number of questionnaires	220	323	246	400	455	476	476	171	613
Camps	78 Berg en Dal 68 Satara 40 Olifants 34 Shingwedzi	62 Berg en Dal 87 Satara 93 Olifants 81 Shingwedzi	20 Berg en Dal 75 Satara 21 Olifants 66 Lower Sabie 64 Skukuza	70 Berg en Dal 84 Satara 39 Olifants 72 Lower Sabie 135 Skukuza	57 Berg en Dal 128 Satara 79 Letaba 63 Lower Sabie 128 Skukuza	19 Malelane 74 Pretoriuskop 249 Skukuza 49 Olifants 85 Letaba	19 Malelane 74 Pretoriuskop 249 Skukuza 49 Olifants 85 Letaba	36 Letaba 55 Skukuza 80 Satara	161 Berg en Dal 173 Satara 191 Skukuza 88 Letaba
Adjusted response rate	220	296	194	343	397	587	587	551	551
Total guests	933,488	1,059,122	1,336,981	1,285,232	1,243,467	1,313,185	1,313,185	n/a	n/a
Unit nights	616,908	637,113	597,924	621,735	650,257	696,161	696,161	n/a	n/a
Visitor groups	176,259	182,032	170,835	177,639	185,788	198,903	198,903	n/a	n/a
Groups per month	14,688	15,169	14,236	14,803	15,482	16,575	16,575	16,575	n/a

The first objective in our analysis was to gain a better understanding of the reasons/motivations for visiting the Kruger National Park. A large number of possible reasons were generated (22), and in reducing these to meaningful underlying factors, the data was subjected to a principal components analysis. The analysis indicated that six factors could be extracted according to the Kaiser criterion (eigenvalues ≥ 1). The analysis proceeded with a maximum likelihood extraction and an oblimin rotation of the data. This resulted in a solution explaining 63.60% of the variance. The results are reported in Table 3.

It is evident that the first factor is made up of two items, both dealing with getting away from a regular routine and relaxing. This factor was accordingly labelled Relaxation (Chronbach's $\alpha = 0.731$; $r = 0.583$). A second factor was made up of four items, dealing with the benefit of visiting the park to children, spending time with family or a significant other, education of other members of the visiting party and the fostering of an appreciation for wildlife in other members of the visiting party. Accordingly, this factor was labelled Significant Others (Chronbach's $\alpha = 0.795$; Item $r(\text{Mean})=0.498$). A third factor comprised five items dealing with educational reasons, and learning about animals in general, endangered species in particular, plants and specific animals. Accordingly, this factor was labelled Educational (Chronbach's $\alpha = 0.887$; Item $r(\text{Mean})=0.615$). The fourth factor clearly consisted of two items that dealt with main reasons for visiting the park, being to engage in wildlife and nature Photography (Chronbach's $\alpha = 0.656$; Item $r = 0.490$). The fifth factor dealt mostly with Park Characteristics, and was labelled as such. Items dealt with visitors having grown up with the park (having a long history of visiting it), knowing it as a well-known brand, or visiting the park for its accommodation, facilities or climate (Chronbach's $\alpha = 0.567$; Item $r(\text{Mean})=0.261$). The final and sixth factor was labelled Events (Chronbach's $\alpha = 0.790$; Item $r(\text{Mean})=0.579$). The items loading on this factor related to doing hiking trails, attending conferences or participating in other events in general. Two items showed no significant loadings on any of the six factors.

Table 3: Factor analysis of the reasons for visiting the Kruger National Park

Rate on a scale of importance why you visited the park	Factors					
	1	2	3	4	5	6
To get away from my regular routine	-.011	-.010	.032	-.027	.734	-.010
To relax	.007	.014	-.093	-.020	.777	.049
To explore a new destination	.048	.114	.190	-.169	.034	-.055
To spend time with friends	.052	.196	.133	.028	.058	.048
For the benefit of my children	-.035	.548	.034	.034	.132	.014
For family recreation or to spend time with someone special	-.019	.411	-.102	.027	.250	.085
So that the other members in my party could learn about the wildlife	.052	.864	-.082	-.134	-.133	.025
So that the other members in my party could develop an appreciation for endangered species and wildlife	.010	.745	-.079	-.287	-.118	.036
Primarily for education reasons (to learn things, increase my knowledge)	-.028	.224	.114	-.633	-.028	-.049
To learn about animals in general	-.050	.014	-.060	-.856	.032	.064
To learn about endangered species	-.009	.014	-.022	-.880	.000	.066
To learn about plants	.245	-.006	.079	-.624	.020	-.022
To learn about specific animals	.125	.008	.107	-.615	.055	.059
To photograph the animals	.407	-.059	-.084	-.233	.028	.094
To photograph plants	1.023	.034	.038	.078	-.030	-.038
Because I grew up with the park	.101	.093	.074	.076	-.010	.406
It is a well-known brand	.015	.078	.226	-.004	-.081	.359
The park has great accommodation and facilities	-.061	-.043	-.105	-.077	.023	.687
I prefer this area because of its climate	.021	-.001	.048	-.046	.099	.476
To do the hiking trails	.059	-.039	.581	-.049	.006	.096
For conferences	.008	-.057	.891	.020	-.074	-.034
For events in the area	-.043	-.040	.792	-.045	-.039	.044

These items dealt with exploring a new destination and spending time with friends. These six extracted factors were also related, and the correlations are reported in Table 4.

It is evident that rather large correlations exist between factors 1, 3 and 4. Factor 2 also shows large correlations with factors 4, 5 and 6. Given the relations between factors, which points to shared variance, it was decided not to proceed with a varimax rotation.

Table 4: Correlations between extracted factors

Factor	1	2	3	4	5
2	.169				
3	.332	.199			
4	-.436	-.413	-.197		
5	.034	.306	-.174	-.085	
6	.275	.311	.268	-.250	.292

Next, a standard regression analysis using the Enter method was employed to investigate the predictive ability of the different independent variables in terms of total expenditure of visitors to the Kruger National Park. As no *a priori* assumptions exist about which variables should be stronger predictors, it was deemed most appropriate to enter all variables simultaneously, and allow the analysis to point out statistically significant predictors of expenditure.

Table 5 shows that when entering the characteristics of visitors and their reasons for visiting the Kruger National Park, nearly 6% of the variance in total expenditure can be predicted. At the $p \leq 0.10$ level, visitors' marital status, the number of days they spent visiting the park, the number of visits they make to national parks in a year, and the importance of visiting motivations such as Significant Others, Educational reasons and Photographic motivations were statistically significant predictors.

Table 5: Regression analysis with total expenditure as dependent variable

Model		Unstandardised coefficients		Std Error	Standardised coefficients		Sig	F	R	R2	ΔR2
		B			Beta	t					
1	(Constant)	2251.892		1433.536		1.571	.116	5.623	0.240	0.058	0.058
	Home language	-5.092		296.385		-0.017	.986				
	Age	237.196		166.511		1.425	.155				
	Marital status	199.374		-.052		-364.072	.068*				
	Home province	-25.576		59.873		-.012	.669				
	Qualification	204.538		142.340		1.437	.151				
	Number of people	88.397		135.785		.020	.515				
	Days spent visiting	287.833		62.618		1.138	.000*				
	Visits to National Parks	-636.085		140.443		-1.131	.000*				
	Relaxation	73.250		186.020		.012	.694				
	Significant others	608.209		183.318		1.116	.001*				
	Educational	-363.199		200.119		-.066	.070*				
	Photographic	314.658		157.388		.064	.046*				
	Park characteristics	109.040		187.956		.018	.562				
	Events	-124.136		208.784		-.018	.552				

* p≤0.10

Analyses of variance (ANOVA's) were then carried out to investigate how differences in terms of visitors' marital status, the number of days they spent visiting the park and their total number of visits to national parks per year affect total expenditure. The results for each of these variables are reported in Table 6.

Table 6: Differences in expenditure based on marital status

Married	Not married	Divorced	Widow/er	Living together	p
4955.3800 ^a	3513.2217 ^b	4679.0962	3279.5540	4004.0375	0.000

^a indicates a statistically significant difference from ^b in row (p=0.05)

Table 6 shows that married visitors spend statistically significantly less than unmarried visitors to the Kruger National Park. Table 7 indicates the amount of days visitors spend in the park in terms of total expenditure.

Table 7: Differences in expenditure based on days spent visiting the park

Up to 1 day	3282.0791 ^a
2 days	3712.0290 ^{bc}
3 days	4952.0380 ^{bde}
4 days	5322.6478 ^{bdg}
5 days	5017.0693 ^{bj}
6 days	5132.9959 ^b
7 or more days	6696.9908 ^{bdfhk}
p	0.000

a indicates a statistically significant difference from b in row (p=0.05)

c indicates a statistically significant difference from d in row (p=0.05)

e indicates a statistically significant difference from f in row (p=0.05)

g indicates a statistically significant difference from h in row (p=0.05)

j indicates a statistically significant difference from k in row (p=0.05)

Table 7 shows that those individuals who spend the shortest time in the park spend statistically significantly less than all other categories of days of visitors (2 up to 7 or more). Visitors who spend 2 days in the park spend statistically significantly less than those who spend 3

or 4 or 7 days or more. Individuals who stay 3 days spend statistically significantly less than those who stay 7 days or more. Individuals who stay 4 days spend statistically significantly less than those who stay 7 days or more. Individuals who stay 5 days spend statistically significantly less than those who stay 7 days or more.

Although the number of annual visits to national parks was a statistically significant predictor in the regression, no statistically significant differences were found between the categories created for this analysis (cf Table 8).

Table 8: Differences in expenditure based on number of visits to national parks

1 visit per 3 years	2 visits per 3 years	3 visits per 3 years	4 visits per 3 years	5+ visits per 3 years	P
4326.0343	5012.1890	4811.5864	4433.3857	4085.5218	0.032

Finally, in order to better understand the relation between total spending and the reasons/motivations of Significant Others, Educational reasons and Photographic motivations, a discriminant analysis was conducted. Three categories of income groups were created by simply allocating the bottom 33.3% of the sample in terms of total expenditure to the “low” spending group, while the top 33.3% were labelled the “high” expenditure group. Results indicated a single variate which was statistically significant in predicting group membership. The standardised canonical discriminant function coefficients for the three variables were 0.945; -0.065 and 0.268, respectively. Based on these coefficients, it is evident that Significant Others, as motivation for visiting the Kruger National Park, makes the largest contribution to the first variate. Considering that these values range between -1 and +1, it is clear that it is the most important of the variables. To further understand the relationship of the variables to the variate, one may consider the canonical variate correlation coefficients – these are indications of the contribution of the variable itself to group separation. Again, it is evident that Significant Others makes the largest contribution (0.970), while Educational reasons (0.526) and Photographic motivations (0.439) also remain important. Based

on this analysis, it may be concluded that the importance of Significant Others can still be considered an important variable in determining expenditure group membership, with greater importance attached to Significant Others associated with greater expenditure.

4. Findings

Based on the results of this article the following findings can be reported. Interestingly, only the biographical variable of marital status made a statistically significant contribution to predicting expenditure, while none of the other biographical variables did (including home language, age, province of residence and level of qualification). In addition, the number of people in the visiting group did not predict total expenditure, while the amount of days spent visiting the park did – with greater expenditure associated with more days spent visiting which is to be expected. Therefore those who stay longest (7 days or more) spend more than individuals in any other category. Considering absolute numbers, however, it would seem that there are three distinct groups exist: those who only stay for one night (low spenders), medium spenders who visit for 2 to 4 days (with those visiting 4 days spending most in this category), and high spenders who visit 5 to 7 or more days (with those visiting 7 or more days spending the most in this category). This research therefore confirms findings by Saayman & Saayman (2006b) indicating the positive relationship between length of stay and amount spent.

It was indicated that married visitors spend statistically significantly more than unmarried visitors. This may seem a logical finding, given that married individuals are perhaps more likely to have two sources of income with which to finance a visit to the Kruger National Park. However, compared in absolute numbers to divorced individuals, total expenditure is rather close.

Although number of visits to national parks per year was a statistically significant predictor of total expenditure, the categories the authors created for the analysis, given the limitations of the available data, did not present with statistically significant differences between them.

This study presents an important contribution in terms of understanding motivations or reasons for visiting the Kruger National Park, in the sense that six distinct factors were extracted from a list of 22 reasons generated. These factors may be expanded upon in future research, but also present a more robust understanding of motivations and reasons for visiting.

In terms of the factors created it was clear that those individuals who deem it important to visit for education reasons, photographic reasons and spend time with significant others (friends or family), are more likely to fall within the high-expenditure group.

These results, therefore, support the findings of Craggs & Schofield (2006) who indicated that a wide range of variables influence visitors expenditure. Based on these findings the following implications can be reported.

First, the variables identified by this research are useful in developing a marketing campaign and strategy to attract high spenders to the Kruger National Park. Secondly, the marketing campaign should promote the motive “significant others” (in other words an opportunity to spend time with family and friends) since this is also an important motive for high spenders. In addition, educational purposes also remains an important reason for visiting, implying that more should be done in this regard. The latter entails a greater focus on displaying information one expects such as animals, plants, geology and anthropology to name a few. It also entails the hosting of specialist talks and showing educational videos. Investment in the youth in terms of educating them about the importance of conservation and exposing them to national parks could help to secure future high spenders. Thirdly, photography as a reason to visit the Kruger National Park was also identified as an aspect that requires more attention from park management. In this regard photographic competitions, a gallery/exhibition and the opportunity to publish unique photos could interest this market to visit the park more often. Lastly, the fact that high spenders visit national parks often shows that these visitors are brand loyal and to retain them is of the highest importance. One way to achieve this is by expanding the loyalty card system (wildcard) currently in use by giving discounts to members who frequently visit the park, for example

five times gives one 10% discount. The Wildcard currently does not make provision for this.

5. Conclusion

The purpose of this article was to apply expenditure-based segmentation of tourists visiting the Kruger National Park and the results identified the variables associated with high spenders. Results also showed that this method of segmentation is effective, especially if the intention of national parks is to create a greater economic impact by means of the services they provide. In the case of national parks, this is paramount since the latter are not only concerned with conservation, but also economic upliftment of the area in which they operate. This implies that more people should benefit from protected areas than only the visitors who visits them. An increase in spending would therefore result in more benefits to the region. Results also indicated the important role that conservation (environmental) education plays especially in attracting future high spenders. From a methodological point of view, the research showed that a large sample probably makes it easier to conduct this type of research when compared to smaller samples. In this regard, it is recommended that further research on this topic would be to complete a segmentation exercise with day visitors as well as a combination of day and overnight visitors to Kruger National Park. In addition, similar research in other national parks and protected areas could be undertaken in order to compare different parks and findings.

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