SAFSERV; An appropriate tourists' satisfaction measurement model in Kruger National Park.

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Abstract – The study initially assessed available literature on the SERVQUAL model, the tourism industry in South Africa with special attention to safari tourism and tourists' satisfaction matters and measurement, only to discover discrepancies covered in this study. Deficiencies found in the above led to the formulation, and testing of the soundness and rigor of the SAFSERV scale. Data was gathered by the use of a structured, pre-tested and validated questionnaire on factors that affect the quality of safari game-viewing and accommodation services that are provided to tourists from five different continents and countries namely South Africa, United States of America, Britain, Australia, and China. The sample size of the study was equal to n=625 tourists. Seven data analysis methods were performed by using cross-tab analyses, SAFSERV analysis based on 21 dimensions and 121 items, factor analysis, Structural Equations Modelling (SEM), and logit analysis. The results showed that more variables besides the original five dimensions of service quality propounded by the above authors could be used for measuring service quality in the South African safari tourism and game viewing industry. The 21 dimensions were Reliability, Responsiveness, Assurance, Empathy, Tangibles, Authenticity, Accessibility, Communication, Hygiene, Harmony, Motivation, Corporate image, Past experience, Price, Eco tangibles, Transparency, Safety and security, Tourist knowledge, Attitude, Climatic conditions, and Personality. Each of these dimensions had variables to be measured under each amounting up to 121.

Keywords: SAFSERV model, tourists' satisfaction, service quality, tourism marketing, wildlife viewing, quantitative analysis.

INTRODUCTION

This study was done in Kruger National Park, South Africa, in the provinces of Mpumalanga and Limpopo. The aim of the study was to assess tourists' satisfaction in an animal or game viewing environment, develop the most appropriate scale that measures tourists' satisfaction in a wildlife viewing context and that can be used by national park managers, marketers, game park resorts owners and related stakeholders in managing and marketing successfully such facilities to the maximum satisfaction of tourists. In line with this overall aim expectations and perceptions of wildlife viewers were evaluated.

Data was collected from five countries from five different continents namely South Africa , China, Australia, United States of America and Britain. Respondents were n=625 using random stratified sampling method to tourists

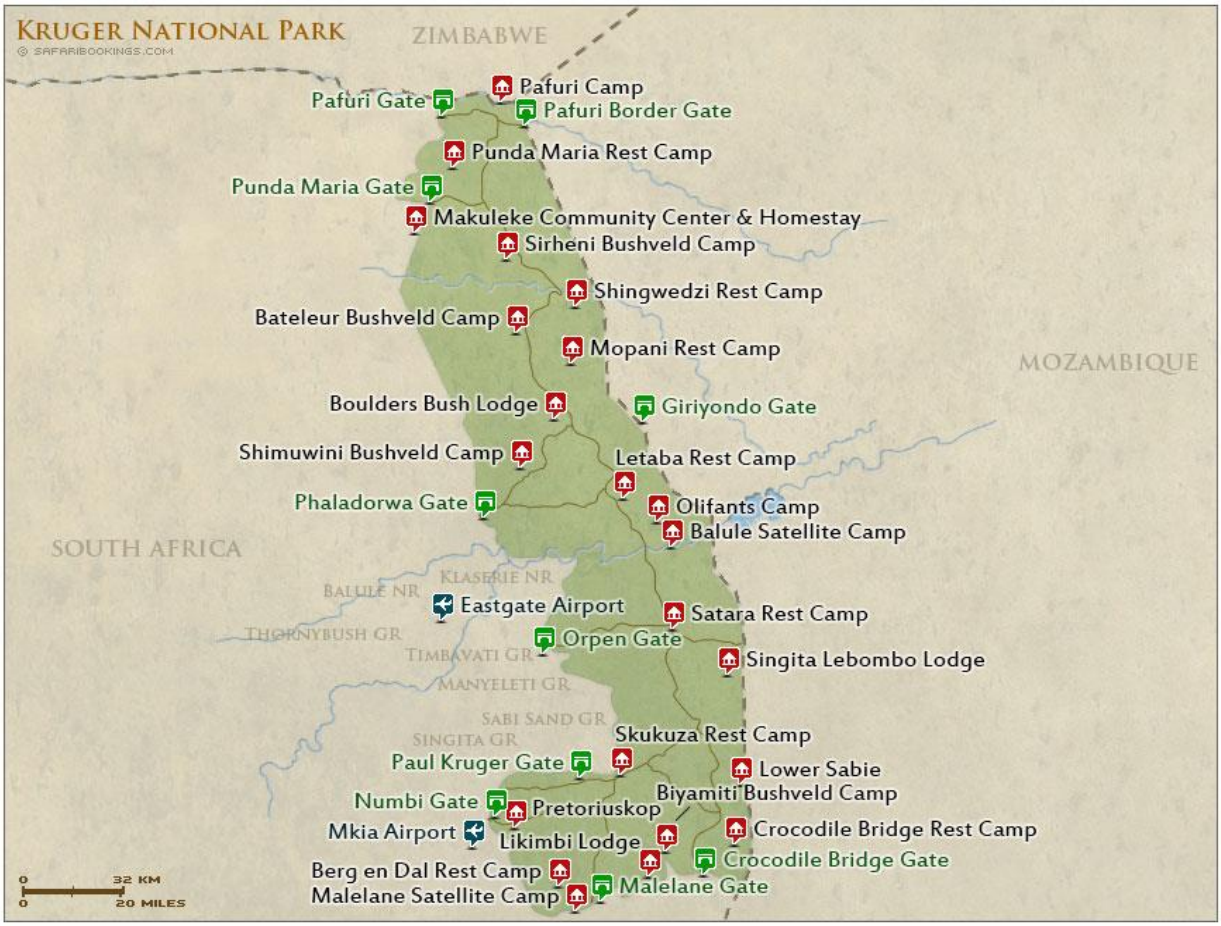

Figure 1.1.1: Aerial map of Kruger National Park

Background of study

There is no study previously done to measure adequately the tourists' satisfaction in a wildlife viewing context. Such a scale was developed in this study namely SAFSERV which accurately, comprehensively measure the expectation and perceptions of wildlife tourists. Previous studies did not generate the depth and length of knowledge as articulated by SAFSERV model in this study. Previous studies with such deficiencies included SERVQUAL model, ECOSERV model, SERVPERF model, Lodgqual model, HOLSERV among others. Recommendations made by other researchers for a conceptualization of another model to measure tourists' satisfaction for each tourist activity (Radder and Han; 2011) prompted this study. Other researchers (Said, Ayub, Yakuub Ayo; 2013) also suggested a new model to measure tourists' satisfaction.

Rationale of study

This study formulated and tested the most suitable service quality scale to measure safari tourists' satisfaction in a Safari sector, game-viewing activity, in particular which will be used by safari owners, managers, marketers and researchers, filling a gap in literature in the process. Arguments advocating for such are well grounded in theory. According to World Tourism Organisation (2012:60-120) there is lack of agreed and established concepts, methodologies, procedures, and standards in the tourism sector. This study will bring the agreement regarding the nature and number of the dimensions particularly in Safari tourism game viewing context. Radder and Han (2011:44) found that for future research a set of service attributes peculiar to specific tourist activity is needed. This means there is a gap in theory that needs to be filled. There is no such scale to accurately measure service quality in safari tourism. That is the major theoretical problem. This is the very reason why this research study is

being done to create a scale or framework to clearly measure service quality for game viewing activity in support of Radder and Han theoretical concern alluded to above. According to Said, Yakuub, Ayo, and Shuib (2013:74) in their research study recommended that future research study might consider including all ECOSERV's attributes and take note of the differences on various variables such as visitors' personality, motivation, past experiences, knowledge, and intrinsic rewards in the conceptualization of another model. New dimensions grounded in theory need to be tried and tested in South Africa and check whether the results will be significant enough as well then a holistic SAFSERV scale will be developed and adopted. The purpose of SAFERV scale is to develop the most appropriate model suitable for measuring the quality of services in a wildlife watching context because such a model does not exists as evidenced by the previous researcher's sentiments above. SAFSERV scale is different from ECOSERV in many ways but put succinctly, it only has six dimensions and thirty items which are inadequate to clearly measure tourists' satisfaction and especially so in a wildlife watching context ,whilst SAFSERV has twenty one dimensions inclusive of the six ECOSERV dimensions and additional fifteen dimensions which are different. The thirty items in the ECOSERV model are inadequate to measure the quality of service in a wildlife context compared to the unique one hundred and twenty –one items in SAFSERV model. SAFERV model is unique in the sense that it encompasses a number of dimensions and items littered all over literature and come up with a comprehensive model that can be used to accurately and comprehensively measure the quality of services in a wildlife watching context. SAFSERV model is unique in that there is no such existing model as evidenced in chapter six of this study and throughout the study including the results and findings.

Research Objectives

To develop the most appropriate, comprehensive scale to measure tourists' satisfaction in a game viewing context.

To ascertain reliability of the new scale that measures tourists' satisfaction in a wildlife viewing context

Research questions

What is the most appropriate and comprehensive scalethat measures tourists' satisfaction in wildlife viewing context?

How reliable is the new scale that measures tourists' satisfaction in a wildlife viewing context?

Research hypotheses

The study had the following 121 research hypotheses that are based on the 121 items used for the assessment of service quality. The 121 items belong to the 21 dimensions used for performing SAFSERV analysis. Each of the 121 null hypotheses was tested by using P-values obtained from the two-sample paired t-test (Hair, Black, Babin& Anderson, 2010) at the 5% level of significance. The null and alternative hypotheses are articulated as shown below along with the decision rule.

Null hypothesis: There is no statistically significant difference between perceived and expected value with regards to item used for the assessment of service quality

Alternative hypothesis: There is a statistically significant difference between perceived and expected value with regards to item used for the assessment of service quality

Decision rule:

At the 5% level of significance, the null hypothesis is rejected if the P-value obtained from the two-sample paired t-test is less than 0.05.

At the 5% level of significance, the null hypothesis cannot be rejected if the P-value obtained from the two-sample paired t-test is greater than or equal to 0.05.

Gap scores and P-values obtained from the two-sample paired-test showed that 9 of the 121 research hypotheses could not be rejected at the 5% level of significance. However, 112 of the 121 research hypotheses had to be

rejected at the 5% level of significance. Table 1.4.1 shows details of the 9 research hypotheses that could not be rejected at the 5% level of significance.

Table 1.4.1: List of 9 research hypothesis accepted at the 5% level of significance

Item of assessment	P-value
Employees instil confidence in customers (ass1)	0.1222
Employees are consistently courteous (ass3)	0.1184
Elephant trekking services are available to visitors all the time (aut8)	0.3220
Visitors are satisfied with the authenticity offered by the service provider (aut12)	0.1364
There is little distance between game reserve and other points of interest (acc2)	0.6744
Visitor intends to visit the safari game reserve again as a result of good communication experience during visit (com8)	0.7683
The outside environment is hygienic (hyg4)	0.3491
There is no danger arising from lack of hygiene (hyg5)	0.3976
Visitor intends to visit the safari game reserve again as a result of knowledge of the cost of service (tk2)	0.5874

In this study, the statistical significance of gap scores was assessed by using P-values obtained from the two-sample paired t-test (Hair, Black, Babin& Anderson, 2010). At the 5% level of significance, a gap score is said to be statistically significant if the P-value is less than 0.05. If the P-value is greater than or equal to 0.05, a gap score is said to be statistically insignificant. In the results of data analyses section, Table 5.4.2 shows gap scores and P-values estimated from all 121 two-sample paired t-tests. The table shows all 121 P-values obtained from two-sample paired t-tests. It can be seen from the table that 112 of the 121 gap scores were significant at the 5% level of significance. Only 9 of the 121 gap scores obtained from data analyses were insignificant at the 5% level of significance. According to Parasuraman, Zeithaml and Berry (1988: 12-37), the results show a significant disparity between expected and perceived values. As such, Kruger National Park should improve the quality of services that are provided to visitors.

This study formulates and test the most suitable service quality scale to measure safari tourists' satisfaction in a Safari sector, game-viewing activity, in particular which will be used by safari owners, managers, marketers and researchers, filling a gap in literature in the process.

Literature review

Measurement of service quality

Tourism can be defined as temporary movement of tourists from their original place of stay or residence within and outside the national border searching for pleasure, adventure, learning, business, religious or medical purposes, elsewhere.Saayman (2008) defines tourism as the total experiential interaction amongst tourists, job providers, government systems and communities in the process of providing attractions, entertainment, transport and accommodation to tourists. Gunn (1994:40) states that tourism is '*the temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations, and the facilities created to cater to their needs.'* In this study, tourism within the border is domestic tourism and tourism across national borders will be referred to as international tourism.

Ecotourism is defined as tourism that is environmentally sound and socially acceptable, contributing both to local economies & the conservation of protected areas while educating the traveller about local nature and culture (e.g., Fennell, 1999; Weaver, 2002; Cater 2004). Supporting that definition, Said, Ayob, Shuib, Yakuub (2013:66) say the above definition makes ecotourism unique to other types of tourism. According to Said, Ayob, Yakuub and Shuib (2013:66) the above definition is consistent with the definition of the term as first introduced by Cellabalos-

Lascurain, from Mexico, the Special Advisor on Ecotourism to IUCN, in the late 1980s. The definition that he suggested of ecotourism was:(a) it involves travelling to and visiting natural and relatively undisturbed area, with an objective of seeing, studying and admiring the feature of the landscape, vegetation, birds and animals, as well as any cultural aspects. ;(b) it involves the local people in the process so they can have socio-economic benefits; and (c) it does not have significant degradation effect on the environment. There have been many other definitions on ecotourism. The researcher propounds that ECOSERV model in tourism by Khan (2003) was born out of this concept. However, the researcher asserts that Khan (2003:109-124) concentrated more on suitability of equipment and facilities to the natural environment, the eco-tangible dimension as the sixth one, that was added to the original five dimensions. This study takes a step further by taking other dimensions and items not necessarily covered before in coming up with a comprehensive model for service quality in tourism safari sector.

According to World Tourism Organisation (2015:9) Safari is the most common term for wildlife watching tourism. This is the working definition in this study. The word "Safari" originates from Swahili and means "journey". Currently the term safari is most often used as a synonym for wildlife watching tourism and refers to tourism taking place mainly in protected areas that offers the opportunity to observe and photograph wild animals in their natural habitats. The classic form of safari entails observing wildlife from four-wheel drive vehicles and staying in tented safari camps or lodges. Newly emerging forms of safari include trekking, kayaking or camel safaris. Lately gorilla trekking is another form of safari tourism especially in equatorial rainforest such as Democratic Republic of Congo. WTO (2015:9) even go further to define wildlife watching tourism exclusively relates to non-consumptive forms of wildlife-based activities as observing and sometimes touching or feeding of animals, in contrast to consumptive forms like hunting and fishing. This is the working definition of this study on safari tourism. It is difficult to separate wildlife watching from the context in which it is experienced. The whole experience cannot be ignored that is why the context of wildlife watching may include animal trekking, lodging, wilderness experience and tent camping experience is intrinsically linked.

According to World Tourism Organisation (2015: 16) wildlife watching does not take place in isolation. But rather takes place in combination with other tourism activities including resort, adventure sports, fishing, cultural heritage, nature-related activities, homestay, volunteering and others. Based on the above sentiment, that is why the questionnaire used in this study tries to invoke opinions from tourists on issues such as their experience with local people around Kruger National Park and culture related to judge their satisfaction level with the whole wildlife watching experience.

According to the World Tourism Organization (2012), no single or unique tool could be used for the assessment of service quality in the safari game viewing sector of tourism. As such, there was a need for the development of a new tool. Radder and Han (2011:44) have called for the construction of assessment tools that are peculiar to every tourism activity and enterprise. Chihwai (2019) this shows that there is a gap in the literature. This is why this research had to be done (Chihwai, Zeleke& Naidoo 2019). Said, Yakuub, Ayo, and Shuib (2013:74) have recommended that assessment must include all ECO SERV attributes and take note of the differences in various variables such as visitors' personality, motivation, past experiences, knowledge, and intrinsic rewards in the conceptualization of another model. Markovic and Jackovic (2013) have stated that there is no universal agreement on the dimensions, number, and nature of measurement tools that are used for the assessment of service quality in the tourism sector. Studies conducted by Africa Tourism Monitor (2015) have shown that the quality of tourism services are often undermined by lack of professionalism, lack of specialised skills in tourism, hospitality, game viewing and safari activities, poor infrastructure, lack of security, difficulties related to travel, unnecessary bureaucracy, and lack of good leadership in the tourism industry.

Differentiation of SAFSERV model from previous adapted models in tourism in brief

SERVQUAL (Parasuraman, Berry &Zeithmal; 1985)

SERVQUAL Consists of five dimensions and twenty-two (22) items to measure service quality in all service industries. The five dimensions are reliability, assurance, tangibles, empathy, and responsiveness.

The major weakness is it is a generic model for all service settings. It fails to cater adequately to measure service quality in a wildlife watching environment under scrutiny in this study as advocated by other researchers such as

Said et al. The proponents of this model clearly stated that it is a skeletal model that can be modified to suit specific tertiary settings (Chihwai; 2019).That justifies the advent of SAFSERV model.

The new study takes into consideration the dimensions but modifies the 22 items to suit the wildlife watching environment. Above all the new proposed SAFSERV model had an additional sixteen dimensions and 121 dimensions (Chihwai; 2019)

To address the above problem, the researcher sought to supplement the existing SERVQUAL model, `investigate whether tourists' expectations are known by safari tourism service providers, whether their expectations are being met and how best South Africa can improve its quality service to remain sustainably competitive. After achieving sustainable quality service and competitiveness South Africa and other nations will improve their Gross Domestic Product (GDP).

Perceived serviced quality and satisfaction model.

Spreng and Mackoy (1996:201-204) developed the perceived serviced quality and satisfaction model to resolve matters of the construct of service quality and customer satisfaction. This model is measured through ten dimensions. That means they doubled the dimensions from five to ten to meet and measure service quality.

Chihwai (2019) the weakness of this model in this particular study is that it is equally generalistic. This model was applying to all service settings just like SERVQUAL. The ten dimensions whilst they are extensions of SERVQUAL, they do not cover the scope of this study, which is game viewing specifically Chihwai (2019).

The PCP attribute model

This model was developed by Philip and Hazlett (1997) which posits that in any service firm three important attributes can be used to measure service quality and contributes to the body of knowledge by identifying weak points by service providers that management needs to work on to exceed customer satisfaction. These three important attributes are what they call pivotal attributes, core attributes, and service environment peripherals.

The weakness of this model in the current study is that it fails to cater for all dimensions necessary to measure tourists' satisfaction in a wildlife watching context. It is equally generic in that it is not specific to tourism (Chihwai 2019).

Value and customer satisfaction model

Oh (1999: 67-82) developed the customer value and customer satisfaction model which posits that price and perceptions are great determinants of what constitutes perceived service received. If customers get the perceived benefits at a reasonable price or rather lower price, then the likelihood of repurchase by such customers will be very high and in the process, there is high customer retention.

Whilst this model addresses just one dimension in the SAFSERV proposed model it fails to cater to a holistic scale to measure all dimensions and items necessary for measuring tourists' satisfaction in a wildlife watching environment. It is equally generic across all service settings (Chihwai 2019).

The LODGSERV model

Knutson et al. (1991) developed a model specifically to suit the lodges and named it Lodgserv. It is meant to measure service quality in the lodges but it still draws its strength from SERVQUAL in the sense that the five dimensions were adopted but however increased the items from the original 22 to twenty- six.

The weakness with this model in addressing the current study is that it concentrates only on lodges yet this study is on wildlife watching context although we have lodged in national parks this model is nowhere near addressing the task at hand (Chihwai 2019).

The HOLSERV model

Wong Ooi Mei, Dean and White (1999) developed a Holserv model specifically for hotels but warned that this model should be used with caution because hotels differ in terms of different grades and even facilities tend to differ from hotel to hotel.

HOLSERV study also concentrates on hotels and lacks the breadth and depth of this current study which is on wildlife watching context and not hotels (Chihwai 2019).

The TANGSERV model

(Raajpoot 2002)

Raajpoot (2002) developed the TANGSERV model to assess the impression of restaurant patrons on the physical aspect environment but however was quick to point out that more research was needed to bring out the construct importance to restaurant customers. According to Zeithaml and Bitner, (2003) the belief is that if customers are satisfied with the physical environment within the restaurant setting it will positively affect quality perception which in turn affects patronage intentions. This sentiment had earlier on been echoed by Bitner (1990:69-82) who came up with the term servicescapes to denote the importance of the physical environment. In her contribution, she said items that fall under tangibles are ambient conditions. The issues to be considered under this item could be the room temperature, it could be the noise coming from around the or within the building and even the smell within or from outside the restaurant all have a bearing towards restaurant patrons. Another item she said that matters is the layout which could be spacious or not, the way furniture is arranged that meets customers' tastes. Corporate logos could add or reduce the value to the customers' satisfaction or artifacts within or outside the building including the decor which she says adds to the happiness of the customers. She further purports that the physical environment matters more to customers who stay for longer periods. This follows logical reasoning that if you stay longer in a boring environment you tend to become even more frustrated unlike if you were just staying overnight you might quickly forget about it. In light of this existing model, Wakefield and Blodgett (1996) additionally proposed a servicescapes framework consisting of five factors taken from previous research done by Baker et al. (1994), Bitner (1992), and Brauer (1992). This seemingly modified framework of the physical environment comprised of items such as accessibility of the layout, facility aesthetics, seating comfort, electronic facilities, and displays and cleanliness. Considerations under accessibility of the layout included furniture arrangement suitability, how does the equipment appeal or look like, and how good is the services area. Under facilities, aesthetics things to be considered include how the building looks like, how it was built, and the inside decorations. Another important item considered was the seating comfort which interrogated the space between customers' sofas or couches or chairs. Still another item considered was electronic equipment and displays which look into things related to corporate logos and signs. The last item considered was the cleanliness of the rooms, restrooms, the floor, tiles, carpets, and walls all that even doors.

This model does not suffice to address the demands of the study objectives. It only touches a very small part of what tourists may want in a National park context (Chihwai 2019).

TOURSERV

This model was developed by Iraqi (2006: 469-492) seeking the opinions of the internal and external tourists' opinions on service quality in Egypt. The study was analyzing the whole tourism sector in Egypt. That makes that study different from this one which is concentrating on wildlife watching and experiences therein, in South Africa Kruger National Park. Part of the conclusions of Tourservqual was that service providers mustprovide employee satisfaction, customer satisfaction, and internal processes to achieve success in the tourism industry in Egypt.

SAFSERV model does not concentrate on the whole tourism sector as was done in TOURSERV but rather it concentrates on wildlife watching context. Tourserv was tested in Egypt and not in South Africa (Chihwai; 2019)

The ECO SERV model

Khan (2003: 109-124) developed the ECO SERV model to suit the eco-tourism sector, all to improve the original SERVQUAL. Due to criticism raised against the inadequacy of the number of items on SERVQUAL amounting only up to 22 this new model increased them to thirty to suit this particular industry. However, the dimensions did not change.

The only dimension added by Khan (2003) was eco-tangibles to the original SERVQUAL model which has five dimensions which are reliability, assurance, tangibles, empathy, and responsiveness. ECO SERV increased the items of measuring service quality of Parasuraman et al. (1985) from twenty-two to thirty.

Chihwai (2019) asserts that this model falls short of addressing the quality of services in a wildlife context as can be evidenced from the comprehensive SAFSERV model from the original five dimensions to twenty-one and raised the items of measurement from the thirty of ECO SERV to one hundred and twenty-one items. In essence, the SAFSERV model even absorbs all of ECO SERV dimensions and items as recommended by other researchers (Said et.al 2013), who even recommended consideration of all ECO SERV attributes and additional dimensions in the conceptualization of another model. Findings and results of ECO SERV are different from those of SAFSERV. It is reasonable to liken ECO SERV to a child in the mother's womb when comparing it to the bigger SAFSERV model, where SAFSERV is the bigger picture (Chihwai 2019).

Tour guide service quality (Mei-LanLin & Yi-Cheng Chen 2017)

Tour guides also contribute to the satisfaction of tourists by services being provided to them in the game viewing context. According to Mei-Lan Lin and Yi-Cheng Chen (2017), tourists' perceptions of service quality of tour guiding were significantly influenced by tour guides' professional competencies. Similar sentiments were earlier on echoed by (Chen et al, 2012; Hoarau, 2014; Mao & Wang 2010) when they regarded tour guides as very important stakeholders in achieving tourist's satisfaction through their professional competencies in showcasing broad tourism knowledge, possessing skills to resolve tourists concerns and issues. Such special skills by tour guides would be attained through continuous learning and development in the tourism fraternity (Bhatia, 2012; Hu & Wall, 2013; Zillinger et al., 2012).

According to Mei-Lan Lin and Yi-Cheng Chen (2017), it is acceptable and believable to regard tour guides' professional competencies as influencers of tourist satisfaction with group package tours (GPT) products. Ordinarily speaking, higher service quality leads to higher tourist satisfaction. Additionally, tour guides' service quality can influence tourists' first impressions and satisfaction with GPTs of travel agencies or tourism firms (Kuo et al., 2016).

Tour guides' service quality hugely influences tourist satisfaction in South African National parks. Enhancing tour guides' professional competencies, knowledge and skills allow high perceived service quality by tourists. Such knowledge and skills tour guides should possess include knowledge of travel business, simple first-aid knowledge and cross-cultural life knowledge, techniques to guide the tour groups, including language, explanation, communication, negotiation, and management (Mei-Lan Lin and Yi-Cheng Chen 2017).

A pleasant professional attitude is one of the important aspects that help in getting tourist satisfaction with the service being provided and that attitude aspect involves being optimistic, modest, honest personal characters and enduring learning all the time. Dimensions of professional competencies are basic qualifications of tour guides and the base for tour guides' advanced career development (Mei-Lan Lin and Yi-Cheng Chen 2017)

Chihwai (2019) argues that this model only concentrates on the employee's aspect such as professional skills, professional knowledge and professional attitudes which are all encompassed in the SAFSERV model. However, SAFSERV goes beyond just tour guides and people and includes specific and peculiar dimensions and items not covered in the tour-guide service quality which comprehensively measures the quality of services offered to tourists.

Material and Methods of study

Descriptive study design was employed in the study exploring dimensions and variable that deeply assess tourists' satisfaction in a wildlife viewing environment.The study was cross sectional in that respondents were from five different countries and continents embracing diversity and thoughts but with one major aim of getting satisfaction from the game viewing experience in the Kruger National Park.The total respondents were 625 from the five countries and five continents with 125 from each country ,who visited this National Park in 2017.The respondents were from these countries South Africa, United Kingdom, China, Australia and USA.

Although there is little consensus on the recommended sample size for Structural Equation Modelling (Sivo et al, 2006), Garver and Mentzer (1999), and Hoelter (1983) proposed a 'critical sample size' of 200. In other words, as a rule of thumb, any number above 200 is understood to provide sufficient statistical power for data analysis. The number 625 of respondents is even way too high compared to a required number of 200 required. According to Guest et al. (2006:102-105) and Creswell (2007:89-95) suggested that for a study which focuses on understanding the commonalities within a fairly homogeneous group, a sample size of between 25 to 30 respondents is sufficient. This is why the researcher chose above 30 respondents from five different countries, South Africa included. According to Freedman (1995) a bigger sample size is good because it reduces sampling errors.

Data was collected using a pretested validated questionnaire. The questionnaire has four sections. Section A of the questionnaire deals with demographic profile of the respondents such as gender and age for example. Section B deals with the satisfaction levels of the respondents with the level of perceived service quality. There are 21 dimensions and 121 variables. The first five dimensions are those of SERVQUAL model propounded by Parasuraman, Berry and Zeithml (1988:12-40) and the items falling under them. Statements were modified to suit the game viewing context, however. The rest of the questions are grounded in literature recommendations, Radder and Han (2011:44) as well as Shuib, Ayob, Yakuub and Said (2013: 66), theories such as ECOSERV of Khan (2003) and related literature. The dimensions are reliability, assurance, tangibles, empathy, responsiveness, authenticity, accessibility, communication, hygiene, harmony, motivation, corporate image, past experiences, price, ecotangibles, transparency, safety and security, tourist knowledge, attitude, climatic conditions, personality, Section C deals with comparison of expectations and perceived performance of the service with Kruger National Park of the same 21 dimensions and 121 items falling under them. Section D deals with perceived overall satisfaction level with each dimension. A Likert scale of 1 up to 5 is used to measure level of agreement with a statement posed where 1 represents strongly disagree and 5 represents strongly agree.

The questionnaires have been chosen as the data collection instrument because it is convenient to administer, yield high results if properly monitored and the anonymity associated with questionnaires heartens participants' candid response (Dawson & Trapp, 2004:102). The questionnaire comprised of continuous, discrete variables among others. The questionnaires were distributed to participants and collected soon after completion by the researcher.

Methods of data analyses

Seven statistical procedures of data analyses were used in the study. These were frequency tables, cross-tab analyses (Pearson's chi-square tests of association), the two-sample paired t-test, factor analysis, SERVQUAL analysis, Structural Equations Modelling (SEM), and logit analysis. The statistical package STATA Version 15 (STATA Corporation, 2017) was for data entry and analysis.

- Frequency tables were obtained for each of the variables Y and X_1, X_2, ..., X_k
- Pearson's chi-square tests of association (Hair, Black, Babin and Anderson, 2010) were performed between the dependent variable of study, Y, and each of the other independent variables of study.
- The two-sample paired t-test (Hair, Black, Babin and Anderson, 2010) was used for comparing pairs of related samples (expected and perceived values).
- Factor analysis (Field, 2013: 131-139) was used for reducing the number of variables that had to be

analysed. This procedure is commonly referred to as data reduction. Eigen values obtained from factor analysis were used for the screening of variables. The principal component analysis method was used for extracting valuable factors.

- SAFSERV analysis was performed in order to measure gap scores between expected and perceived scores of service quality with regards to 21 dimensions and a total of 121 items or variables of study. Analysis was performed by using a 5-point ordinal scale in which the following possible answers were used for measurement.

  1. Strongly disagree
  2. Disagree
  3. Neutral
  4. Agree
  5. Strongly agree

The questionnaire of study is an adaptation of the questionnaire of study developed by Badri, Abdulla and Al-Madani (2005: 819-848) for a similar study. To each of the 22 questions in this section of the questionnaire, respondents were asked to provide an answer that best described their personal experience and view by circling the number corresponding to their choice of answer (1, 2, 3, 4 or 5).

- Structural Equations Modelling (O'Rourke and Hatcher, 2013) was used for identifying key predictors of satisfactory service delivery by employees of Kruger National Park.

- Logit analysis (Hosmer and Lemeshow, 2013) was used for estimating odds ratios for key predictors of service delivery at Kruger National Park.

The two-sample paired t-test for comparison of related or paired samples

The two-sample paired t-test (Hair, Black, Babin and Anderson, 2010) was used for comparing perceptions and expectations of visitors of Kruger National Park on the quality of services provided to them by employees of Kruger National Park. Values obtained by using a 5-point ordinal scale were reduced to 2 from 5 by collapsing the 5 categories to 2 in order to perform the two-sample paired t-test. The 5 possible values on perceived and expected values (Strongly agree, Agree, Neutral, Disagree, Strongly disagree) were collapsed into 2 values by creating only 2 categories. Three of the 5 possible responses (neutral, disagree or strongly disagree) were defined as disagreement or dissatisfaction with the quality of services provided. The other 2 of the 5 possible responses (agree or strongly agree) were defined as agreement or satisfaction with the quality of services provided.

Thus,

1. Disagreement or dissatisfaction with the quality of services provided to customers was represented by three responses (neutral, disagree or strongly disagree); whereas

2. Agreement or satisfaction with the quality of services provided to customers was represented by the two responses (agree or strongly agree)

As part of SAFSERV analysis, comparison was made among paired samples by using the two-sample paired t-test. The comparison made was between the perceptions and expectations of customers on the quality of services that were provided to them. All paired t-tests were performed at the 5% level of significance. At the 5% level, true average differences between the two groups being compared with each other were said to be significant if the P-value was less than 0.05. True average differences between the two groups being compared with each other were said to be insignificant if the P-value was greater than or equal to 0.05.

The Pearson chi-square test of association

The Pearson chi-square test of association (Hair, Black, Babin and Anderson, 2010) was used to measure the strength of association between two or more categorical (discrete) variables. The null hypothesis states that the association between variables 1 and 2 is insignificant. The alternative hypothesis states that there is a significant association between the two variables. The null hypothesis is rejected if the p-value is less than the level of significance. The null hypothesis is accepted if the P-value is greater than or equal to the level of significance. If the null hypothesis is rejected, it means that the association or interdependence between variables 1 and 2 is quite significant. That is, if a randomly identified observation belongs to category 1 of variable 1, it is also likely to belong to category 1 of variable 2 (assuming that the categories of variables 1 and 2 have been ordered systematically, in an increasing or decreasing order of strength of influencing the dependent variable Y).

Notations:

H_0 Denotes the null hypothesis

H_1 Denotes the alternative hypothesis

H_0 : There is no significant association between factors A and B

H_1 : There is a significant association between factors A and B

Decision rule:

At the α level of significance,

1. Reject H_0 if the P-value is less than the level of significance, α
2. Do not reject H_0 if the P-value is greater than or equal to the level of significance, α

Structural Equations Modelling (SEM)

Structural Equations Modelling (O'Rourke and Hatcher, 2013) was used for identifying key predictors of satisfactory service delivery by employees of Kruger National Park. Table 3.4.1 shows estimates obtained from principal components analysis in which the percentage of variance explained by each one of the 3 predictor variables was estimated.

Logit analysis

The measure of effect in logistic regression analysis is the odds ratio (OR).

The outcome variable Y is dichotomous, and has only 2 categories. That is,

$$Y = \begin{cases} 1 \;\; if \;\; event\ occurs \\ 0 \;\; otherwise \end{cases}$$

$X_1, X_2, ..., X_k$ are a combination of k discrete and continuous explanatory variables that affect the outcome variable Y.

An estimated regression coefficient is denoted by $\hat{\beta}$. In logit analysis, a regression coefficient is estimated for each explanatory variable included in the model. In general, the binary logistic regression of a dichotomous outcome variable Y on a combination of k discrete and continuous independent variables $X_1, \ldots, X_k$ is defined by the following logit function:

$$\log it(p_i) = \ln\left(\frac{p_i}{1-p_i}\right) = \hat{\beta}_0 + \hat{\beta}_1 X_1 + \ldots\ldots\ldots + \hat{\beta}_k X_k$$

Validity and reliability tests

Validity was ensured by using face validity (Cohen, West & Aiken, 2013). This was done by pre-testing the questionnaire of study based on a pilot study of size 5 respondents. Reliability and internal consistency were ensured by using the Cronbach Alpha test (White, 2005: 42-43). The Cronbach Alpha test produces a coefficient that could be used for assessing degree of reliability and internal consistency. Cronbach Alpha coefficients of 75% or above indicate that the data collection tools and instruments are internally consistent and reliable (Andrew, Pedersen &McEvoy, 2011: 202-205).

Results from Cross tab analysis

In this study, the Pearson chi-square test of association or cross-tab analysis (Hair, Black, Babin and Anderson, 2010) was used for assessing the strength of association or interdependence between pairs of categorical variables. The tests were performed between the overall degree of satisfaction of visitors with the quality of services that were provided to them by employees of Kruger National Park (satisfied or not satisfied) and all other variables of study. At the 5% level of significance, the strength of association between two categorical variables is said to be statistically significant if the P-value is smaller than 0.05. If the P-value is greater than or equal to 0.05, it is said that the two variables are independent of each other at the 5% level of significance. In this study, all expected cell frequencies were greater than 5. As such, results of data analysis obtained from Pearson's chi-square tests of association were all valid.

Table 5.3.1, below, shows 13 significant two-by-two associations obtained from Pearson's chi-square tests of associations. At the 5% level of significance, significant associations have large observed chi-square values and P-values that are smaller than 0.05. Significant results obtained from Pearson's chi-square tests of associations ($P < 0.05$) showed that overall satisfaction with the quality of services that were provided to visitors by employees of Kruger National Park was significantly associated with the perception of customers on the following 13 variables of study:

1. Gender of visitor
2. Previous safari experience
3. Availability of all animals of interest
4. Transparency between service provider and tourists
5. Being courteous to visitors consistently
6. Providing prompt services to customers
7. Safari game reserve attractions
8. Ability to provide truthful original adventure
9. Knowledge of good products and services
10. Intention to visit safari again in future
11. Positive knowledge of safari
12. Smart looking employees
13. Positive past safari experience

Stratified data analysis confirmed that the variable gender (male, female) was a confounding variable. A confounding variable is a variable that distorts the true nature of relationship between two variables. Performing stratified analysis is a standard method of finding out whether or not a suspected variable is indeed a confounding variable. In this study, stratified data analysis was performed in order to find out whether or not gender was a confounding variable. Such analysis confirmed that gender was indeed a confounding variable. As such, it was discarded from all subsequent multivariate data analyses.

It can be seen from Table 5.3.1 that all 13 factors are significant at the 5% level of significance. This is because all 13 P-values are smaller than 5% = 0.05. The Pearson chi-square test of association is commonly used as a screening tool in cases where the number of variables of study is large. The results obtained above in Table 5.3.1 were used for subsequent analysis was done by using factor analysis. The variable gender was found to be a confounding variable by performing data analyses for males and females separately on key indicators of satisfaction. As such, it was discarded from all subsequent multivariate data analyses.

Results from SAFSERV analysis

The classic SERVQUAL model (Parasuraman, Zeithaml and Berry, 1988: 12-37) is based on 5 dimensions (Reliability, Responsiveness, Assurance, Empathy and Tangibles) consisting of 22 items. By contrast, in this particular study, SAFSERV analysis was performed by using two-sample paired t-tests based on 21 dimensions consisting of a total of 121 items. Each one of the 121 items is vital for performing a comprehensive assessment on the degree to which visitors are satisfied with the quality of services that are provided to visitors coming to Kruger National Park. It must be noted that SAFSERV is quite appropriate for Kruger National Park in view of the fact that the park is the largest such park in the world providing services to visitors with a wide range of diverse backgrounds, expectations, perceptions, past experience and perspective on tourism, wildlife and safari experience. Table 5.4.1 shows the list of 21 dimensions and 121 items used for performing SAFSERV analyses in the study.

The Cronbach Alpha test (Hair, Black, Babin and Anderson, 2010) was used for ensuring reliability and internal consistency in the measurement tools used for the assessment of expected and perceived values from respondents. Table 5.4.1 shows estimated Cronbach Alpha coefficients for expected and perceived values. It can be seen from the table that all estimated coefficients for expected and perceived values by respondents have magnitudes of 75% or above. It can also be seen from the table that estimated coefficients for expected and perceived values were fairly well similar with each other. This shows that the tools used for the assessment of expected and perceived values of all 21 dimensions and the associated 121 items in the study were fairly highly reliable and suitable for the purpose of the study (Parasuraman, Zeithaml& Berry, 1988: 12-37).

Table 5.4.1: List of 21 dimensions and 121 items used for performing SAFSERV analyses

Dimension	**Number of items**	**Coefficients for expected values**	**Coefficients for perceived values**
Reliability	5	0.8014	0.8209
Responsiveness	4	0.7745	0.7604
Assurance	4	0.7959	0.7684
Empathy	5	0.7644	0.7688
Tangibles	4	0.7593	0.7599
Authenticity	13	0.8018	0.8123
Accessibility	7	0.7809	0.7949
Communication	8	0.7788	0.7791
Hygiene	7	0.7608	0.7689
Harmony	8	0.7566	0.7599
Motivation	14	0.8041	0.8128
Corporate image	9	0.7860	0.7949
Past experience	2	0.7729	0.7762
Price	3	0.7643	0.7692

Eco tangibles	3	0.7576	0.7593
Transparency	3	0.8018	0.8109
Safety and security	5	0.7845	0.7909
Tourist knowledge	5	0.7759	0.7984
Attitude	3	0.7619	0.7698
Climatic conditions	3	0.7587	0.7596
Personality	6	0.8444	0.8239
Total	121		

A description of each one of the 121 items is provided in the questionnaire of study.

Table 5.4.2 shows estimated gap scores for expected and perceived values. A gap score is defined as the difference between the mean of perceived and expected values (Parasuraman, Zeithaml& Berry, 1988: 12-37).

Gap score = Perception mean score – Expectation mean score

$$Average\ gap\ score = \frac{\sum_{i=1}^{k}(\overline{P}_i - \overline{E}_i)}{k}$$ where k denotes the number of items used for assessment of dimensions.

In this study, the statistical significance of gap scores was assessed by using P-values obtained from the two-sample paired t-test (Hair, Black, Babin& Anderson, 2010). At the 5% level of significance, a gap score is said to be statistically significant is the P-value is less than 0.05. If the P-value is greater than or equal to 0.05, a gap score is said to be statistically insignificant. Table 5.4.2 shows gap scores estimated from analyses. It can be seen from the table that 112 of the 121 gap scores were significant at the 5% level of significance. Only 9 of the 121 gap scores obtained from data analyses were insignificant at the 5% level of significance. According to Parasuraman, Zeithaml and Berry (1988: 12-37), the results show a significant disparity between expected and perceived values. As such, Kruger National Park should improve the quality of services that are provided to visitors.

Factor analysis (Field, 2013: 134-158) was used for identifying influential predictors of perceived values of service quality.

5.5.1: Factor analysis for perceived values of service quality

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used in order to test the adequacy of the sample used for factor analysis, and the test gave an estimated KMO value of 0.811= 81.1%, a figure that is greater than 75%. This large figure indicates that results estimated from factor analysis for perception are fairly well reliable.

Bartlett's test of Sphericity was used for testing the adequacy of the correlation matrix, and gave an observed chi-squared value of 559.406 (very large value) with 209 degrees of freedom (very large degrees of freedom) and a P-value of 0.000 (a P-value that is much smaller than 0.05). These estimated figures show that the use of factor analysis for identifying key predictors of perception is fairly well justified and appropriate.

Results from factor analysis

Table 5.5.1.1: Estimates obtained from the KMO and Bartlett's test for perception

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy	0.811
Observed value of chi-square statistic for KMO test	559.406
Bartlett's Test of sphericity Degrees of freedom	209
P-value for Bartlett's Test of sphericity Degrees of freedom	0.000

The principal axis factoring method was used for estimating communalities for 5 influential predictors of perception. Table 5.5.1.2 shows the communalities estimated for the 5 influential predictor variables of perception.

Table 5.5.1.2: Communalities extracted for 5 influential predictors of perception

Variable of study	Extraction based on principal component analysis
Previous safari experience	0.703
Availability of all animals of interest	0.671
Transparency between service provider and visitors	0.599
Courtesy to visitors	0.587
Providing prompt services to visitors	0.559

Results from structural equation modelling

Structural Equations Modelling (O'Rourke and Hatcher, 2013) was used for estimating regression coefficients for the top 3 influential predictors of profitability. The procedure identified 3 predictor variables with reliable estimates. These predictor variables were: Previous safari experience, Availability of all animals of interest, and Transparency between service provider and visitors, in a decreasing order of strength. The initial conceptual model consisted of 5 predictor variables. These were Previous safari experience, Availability of all animals of interest, Transparency between service provider and visitors, Courtesy to visitors, and Prompt services to visitors. Estimates for the initial conceptual model were not reliable. The conceptual model was subsequently amended by removing 2 of the 5 predictor variables from the model. The two variables that were removed from the initial conceptual model were Courtesy to visitors, and Prompt services to visitors. Estimates for the amended conceptual model were reliable.

Exploratory and confirmatory factor analyses (Field, 2010) were used for determining the number of groups and the number of variables in each of the various groups required for measuring the strengths of associations among pairs of variables by using correlation coefficients as a measure of strength. The hypothesised model is based on a review of the relevant literature (Hair, Black, Babin& Anderson, 2010). In this study, confirmatory factor analysis was used by developing hypotheses about 3 factors that affect satisfaction with the quality of services provided to tourists at Kruger National Park based on results obtained from crosstab analyses. These 3 factors were previous safari experience, availability of all animals of interest, and transparency between service provider and visitors. Constraints were imposed on the hypothesised model. If the constraints imposed on the model are inconsistent with the data collected as part of the study, then the hypothesised model is rejected. The degree to which a predictor variable is useful in explaining variability in viability is assessed by examining the magnitude of factor loadings. Influential predictor variables are characterised by factor loadings that are close to -1 or +1. Predictor variables for which factor loading are close to 0 are not influential predictors of viability.

The theoretical reliability of the initial model was assessed by using standard diagnostic procedures. The magnitude of the observed chi-square statistic was used for assessing the degree of reliability of the fitted model. Large values of the observed chi-square statistic indicate that the fitted model is reliable. The Adjusted Goodness of Fit Index (AGFI) statistic was used for assessing the degree to which the fitted model was a true estimate of the hypothesised model. Values of AGFI that are greater than or equal to 0.95 indicate that the fitted model is theoretically reliable. The Tucker Lewis Index (TLI) was used for comparing the degree of similarity between the

chi-squared value of the hypothesised model and the chi-squared value of the null model. Values of TLI vary from 0 to 1. Reliable fitted models are characterised by TLI values of 0.95 or greater. The comparative Fit Index (CFI) was used for assessing the degree of similarity between the data collected from the 625 tourists who took part in the study and the hypothesised model. Values of CFI vary from 0 to 1. Theoretically reliable fitted models are characterised by CFI values of 0.95 or greater. The Standardized Root Mean Square Error of Approximation (SRMSEA) value of the fitted model was used for assessing the degree of precision in estimating regression coefficients. Theoretically reliable fitted models are characterised by SRMSEA values of 0.05 or less. The Coefficient of Determination (CD) was used for assessing the percentage of overall variation explained by the fitted model. Values of CD greater than or equal to 0.75 indicate that the fitted model explains a fairly good percentage of variability in the viability of textile businesses.

Maximum Likelihood Estimators (MLE) was used for estimating regression coefficients. An MLE estimator uses an Observed Information Matrix (OIM) for quantifying the magnitude of error arising from the estimation of regression coefficients. OIM values of 0.05 or less indicate that the fitted model is theoretically reliable. The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) were used for assessing the discrepancy between fitted and true models (Aho, Derryberry and Peterson, 2014). Low values of the AIC and BIC statistics indicate that the fitted model is theoretically reliable. The following stimates were obtained for the initial conceptual model.

Table 5.6.1: Structural equations estimates for initial conceptual model (n=625)

Predictor variable	Coefficient	Z-Statistic	P-value	OIM Std. Error
Previous safari experience	1.28	3.18	0.0000	0.0719
Availability of all animals of interest	1.14	2.93	0.0003	0.0665
Transparency	0.94	2.77	0.0105	0.1154
Courtesy	0.87	2.41	0.0109	0.1154
Prompt services	0.84	2.31	0.0116	0.2013
Constant	1.76	2.12	0.0029	1.2218

Results from logit regression

Logit regression analysis (Hosmer and Lemeshow, 2004) was usedinordertoidentify key predictors of satisfaction with the quality of services provided to visitors at Kruger National Park.
Thisprocedureshowedthatsatisfactioninthequality of service delivery was influenced significantly by 3factors. Inlogisticregressionanalysis, the measure of effect is the odds ratio.At the 5%levelofsignificance, significant predictor variables are characterised by oddsratiosthatdifferfrom1significantly, P-valuesthataresmallerthan0.05, and95%confidence intervals that do not contain 1,

Results obtained from logit analysis showed that the degree of satisfaction of customers with the quality of services provided to them was significantly influenced by 3 predictor variables. These predictor variables were previous safari experience, availability of all animals of interest, and transparency between service provider and visitors, in a decreasing order of strength. Thepercentageofoverallcorrectclassificationforthisprocedure was equalto 78.48%.Thisshowsthatthe fitted logistic regressionmodel is fairlywellreliable (Hosmer&Lemeshow, 2013).

Interpretation of odds ratio for the variable "Previous safari experience"

The odds ratio of the variable "Previous safari experience" is equal to 3.44. This shows that a visitor who has had a previous safari experience is 3.44 times as likely to be satisfied with the quality of services provided to visitors at Kruger National Park in comparison with another visitor who has not had a previous safari experience.

Interpretation of odds ratio for the variable "Availability of all animals of interest"

The odds ratio of the variable "Availability of all animals of interest" is equal to 2.71. This shows that a visitor who can see all animals of interest is 2.71 times as likely to be satisfied with the quality of services provided to visitors at Kruger National Park in comparison with another visitor who cannot see all animals of interest.

Interpretation of odds ratio for the variable "Transparency between service provider and visitors"

The odds ratio of the variable "Transparency between service provider and visitors" is equal to 2.47. This shows that a visitor who experiences adequate transparency is 2.47 times as likely to be satisfied with the quality of services provided to visitors at Kruger National Park in comparison with another visitor who fails to experience adequate transparency.

Discussions

Figure 5.2.1 shows a pie chart for the perception held by local and international tourists about the quality of services provided to tourists by employees of Kruger National Park by the standards of Dolnicar, Coltman and Sharma (2015).The fact that the tourists do accept the one hundred and twenty one (121) items as contributors to their satisfaction in wildlife watching context proves the relevancy of SAFSERV model. Eighty five percent of tourists were satisfied with the services provide to them whilst fifteen percent of tourists showed dissatisfaction. SAFSERV model is therefore an important and comprehensive model to measure tourist's satisfaction in a wildlife context.

Table 5.3.1 show Pearson's chi-square test produced expected cell frequencies which were greater than 5 showing validity of the Pearson's chi-square test of association for thirteen items in the SAFSERV model. If the P-value is greater than or equal to 0.05, it is said that the two variables are independent of each other at the 5% level of significance. That shows the relevancy of items and dimensions in the SAFSERV model. The thirteen most significant items associated with satisfaction of services received from Kruger National Park were Gender of visitor , Previous safari experience ,Availability of all animals of interest ,Transparency between service provider and tourists, Being courteous to visitors consistently, Providing prompt services to customers ,Safari game reserve attractions ,Ability to provide , Truthful original adventure ,Knowledge of good products and services ,Intention to visit safari again in future, Positive knowledge of safari, Smart looking employees, Positive past safari experience. These items specifically appear in SAFSERV model tested in Kruger National Park therefore; SAFSERV is relevant and contribute to accurately measuring customer satisfaction in wildlife context.

Table 5.4.1: shows a list of 21 dimensions and 121 items used for performing SAFSERV analyses and this table clearly shows all the one hundred and twenty one items in SAFSERV model attaining coefficient value of higher than 75% . It can also be seen from the table that estimated coefficients for expected and perceived values were fairly well similar with each other. This shows that the tools used for the assessment of expected and perceived values of all 21 dimensions and the associated 121 items in the study were fairly highly reliable and suitable for the purpose of the study (Parasuraman, Zeithaml& Berry, 1988: 12-37). Passing this Cronbach Alpha test for reliability and internal consistent for all items in the SAFSERV clearly demonstrates the usefulness and relevancy of SAFSERV model items and dimensions in measuring tourists satisfaction. It is not an accidental model. Empirical evidence proves the importance of SAFSERV.

Table 5.4.2 shows gap scores estimated from analyses. It can be seen from the table that 112 of the 121 gap scores were significant at the 5% level of significance. Only 9 of the 121 gap scores obtained from data analyses were insignificant at the 5% level of significance. According to Parasuraman, Zeithaml and Berry (1988: 12-37), the results show a significant disparity between expected and perceived values. That outcome proves that the items in SAFSERV model are relevant as indicators of tourists' satisfaction in a wildlife context because tourists showed that they expect such services at a higher level than they actually received. That gap shows the need for positive action to be taken by managers, marketers and employees of Kruger National Park. SAFSERV model is therefore an appropriate scale to measure tourist satisfaction in wildlife watching context.

Table 5.5.1.3 shows estimated Eigen values and percentages of explained variation for the 5 key predictors of perception. Based on results obtained from factor analysis for expectations, the expectation of respondents on the quality of services that were provided to them was significantly influenced by 5 key predictors of perception. These 5 predictor variables were previous safari experience, availability of all animals of interest, transparency between service provider and visitors, courtesy to visitors, and providing prompt services to visitors, in a decreasing order of strength. It is important to note that these five do not necessarily appear in the conventional SERVQUAL model and especially so, in the wildlife context .Specifically, such predictors do not appear as they are, in previous studies. That makes SAFSERV an important and relevant peculiar model.

Table 5.6.1 shows 3 predictor variables with reliable estimates on perception. These predictor variables were: Previous safari experience, Availability of all animals of interest, and Transparency between service provider and visitors, in a decreasing order of strength. Logit Regression analysis was also used to produce key predictors on perception and the three items listed above were the same. No study has brought such results before and that makes SAFSERV model and its application relevant.

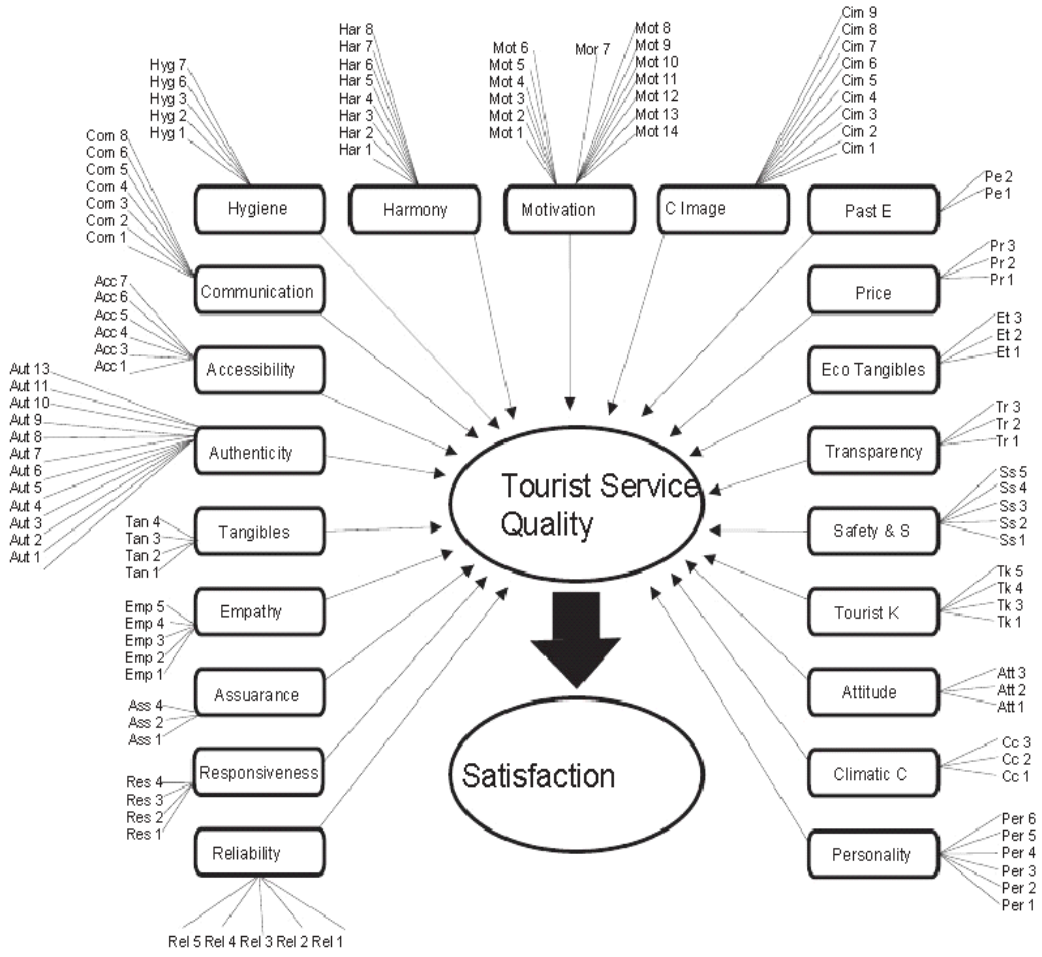

Figure 6.1.1SAFSERV model to measure service quality in tourism and wildlife watching context.

Source: Own source

Findings

Eighty –five percent of tourists who visited Kruger National Park are satisfied with the quality of services provided by employees of South Africa National Parks using SAFSERV model.

SAFSERV model dimensions and variables are reliable and valid as to measure the tourists' satisfaction with services provided in a wildlife viewing context.

SAFSERV model is the most appropriate to measure tourists' satisfaction in a wildlife context especially.

Recommendations

Replicating SAFSERV model in other tourism and wildlife viewing contexts.

Adoption of SAFSERV as the comprehensive model to measure tourists' satisfaction in game viewing environment worldwide.

Modifying SAFSERV model in other tourism activities to measure tourists' satisfaction.

Adoption and modifying of SAFSERV model in other service or tertiary settings measuring to customer satisfaction.

SAFSERV model adoption as a marketing and branding toolkit for tourism industry, owners of tourism facilities, tourism authorities, managers and marketers.

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