

A concessionaire model for food and beverage operations in South African National Parks

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Abstract

In recent years, protected areas have come under pressure due to the budget cuts of government. As a result, national parks have had to devise strategies by means of which they are able to generate additional revenue, in order to remain competitive. Such a strategy is the introduction of public-private partnerships, which allows the private sector to operate certain lodging facilities, restaurants and shops within parks. SANParks introduced their commercialization strategy in 2000 and overall it has been a success. However, despite earning much needed revenue; there are many complaints and overall dissatisfaction from tourists with restaurant and shop facilities operated by concessionaires in SANParks.

A survey capturing more than 5000 questionnaires was conducted to explore SANParks concessionaires in terms of food and beverages to identify factors relating to the consumption of food and beverages by tourists. The data was analysed to provide information needed to construct a model for concessionaire food and beverage operations in SANParks. Data provided a demographic profile of respondents, factor analysis provided food consumption factors and lastly structural equation modelling which provided goodness of fit indices for the concessionaire model. The purpose of this study was to construct a model for concessionaire food and beverage operations at SANParks.

Keywords: tourism, protected areas, concessionaires, SANParks, food consumer behaviour, public-private partnerships, national parks

1. Introduction

Tourists increasingly demand higher standards in quality services, particularly for food and hospitality, and “secondary”, “derisive”, and “supporting” experiences have attracted the full attention of the tourism industry (Quan & Wang, 2004:297). The role of food and eating in relation to the image of the tourist destination has not been the issue of any widespread research studies, and little has been done to understand the role of food in tourist consumption (Hjalager & Corigliano, 2000:281). All tourists have to eat when on holiday and, thus, engage in some form of travel dining (Chang, Kivela & Mak., 2011:307). The significance of travel dining in the travel experience is demonstrated not merely in its basic function as sustenance, but also in the benefits that supplement the overall travel experience (Chang *et al.*,

2011:307). Food has become an increasingly important element in the tourist industry, with approximately 25% of total tourist expenditure being spent on food; however, social science research regarding the tourist experience lacks sufficient consideration of the role of food consumption (Quan & Wang, 2004:299).

The restaurants and shop outlets in national parks have a history of providing poor food and beverage services to tourists (Mabunda, 2004:86). Tourists are unsatisfied with the restaurant and shop outlets, and these aspects were the poorest performing tourism operations in parks for the period 2011/2012 (SANParks, 2012:33). Mabunda (2004:86) states that since outsourcing restaurants and facilities as part of the commercialisation strategy, tourists have perceived levels of food quality and service to be poorer than before

outsourcing, which requires immediate remedial action. According to the SANParks Annual Report 2011/2012 (2012:31), restaurant operations have remained the poorest performing of all indicators measured and have, therefore, required contract variation management. A review of tourist requirements with regard to food and beverage operations is, therefore, critical in order to ensure that the correct concessionaire is considered for food and beverage operations in SANParks.

The purpose of the study was to develop a model for concessionaire food and beverage operations at SANParks to provide a holistic view of tourism in respect of food and beverage operations for nature-based products. The model will allow SANParks to determine what it is that affects the decisions of tourists with respect to destination choice regarding food and beverage operations at a destination. The model will provide SANParks with an interpretation of what is required from concessionaires with respect to tourist consumer behaviour.

2. Understanding tourist food consumptive behaviour

An understanding of tourist consumptive behaviour is of paramount importance for the host destination, as the economic benefits of tourism flow from tourists' spending (Divisekera, 2010:629). Similarly, the attractiveness of the destination is associated with its ability to satisfy tourist needs and motivations (Correia, Metal, Ferreira Da Costa & Peres, 2008:165). Links between food experiences and destinations have featured in the overall success of tourism, and both the tourism and restaurant industries have become more aware of the need to market, develop, and promote restaurants as part of the tourism product (Ryu & Han, 2010:491). Yet food and beverages has its own characteristics and consumer behaviour factors. Restaurants (franchised and hotel restaurants), takeaways, and even caterers are more volatile, changeable, and fashion-prone than hotels or tourist attractions (Johns & Pine, 2002:120).

According to Fox (cited by Ryu & Han, 2010:492), tourists' increased expectations of top service and food quality have created a strong demand for a wide variety of dining menus and menu options, with a growing emphasis on regional specialities and fresh ingredients. It is for these reasons that tourists visiting developing countries prefer fast-food (franchised) restaurants to traditional restaurants (Gäl, Akbay, Özel & Ozdes Akbay, 2008:32), as franchised establishments provide consistency in their offerings. Meal-eating patterns are changing (O'Mahony & Hall, 2007:52), and the prevalence of overweight people has risen so rapidly that it has been called an epidemic (Maubach, Hoek & McCreanor, 2009:297). This has impacted the factors that affect consumer behaviour in terms of food consumption and has affected the offerings of restaurants and shops.

2.1 Tourist food consumption

Tourist food demand is inelastic (Mak, Lumbers, Eves & Chang, 2011:928), which means that the demand for food by the tourist is not significantly affected by an increase or decrease in price. Demand that is significantly affected by the price usually occurs when there is a substitute available (Blythe, 2008:18). Since SANParks does not offer a variety of restaurant or shop options, demand for food will be inelastic. Many studies related to food consumption are based on the understanding of food-associated behaviours, which include liking, preference, choice, and intake (Mak *et al.*, 2011:928). Food liking refers to the satisfaction obtained from tasting a given food, which provides a description of the sensory product properties (Köster, 2009:71). Preference refers to the selection of one food item over another, which is affected by liking, availability, health value, convenience, and economic influences (Arora, 2007:222). Food choice refers to the decisions made by the consumer at the point of purchasing and consuming the food product (Mak *et al.*, 2011:929). Lastly, food intake refers to the amount of food ingested. Rozin (2006:24) states that food preference is determined by food liking and that food intake is determined by food preference, but

many other variables intervene. These variables can be grouped into the

individual/tourist, the food, and the environment and are illustrated in Figure 1.

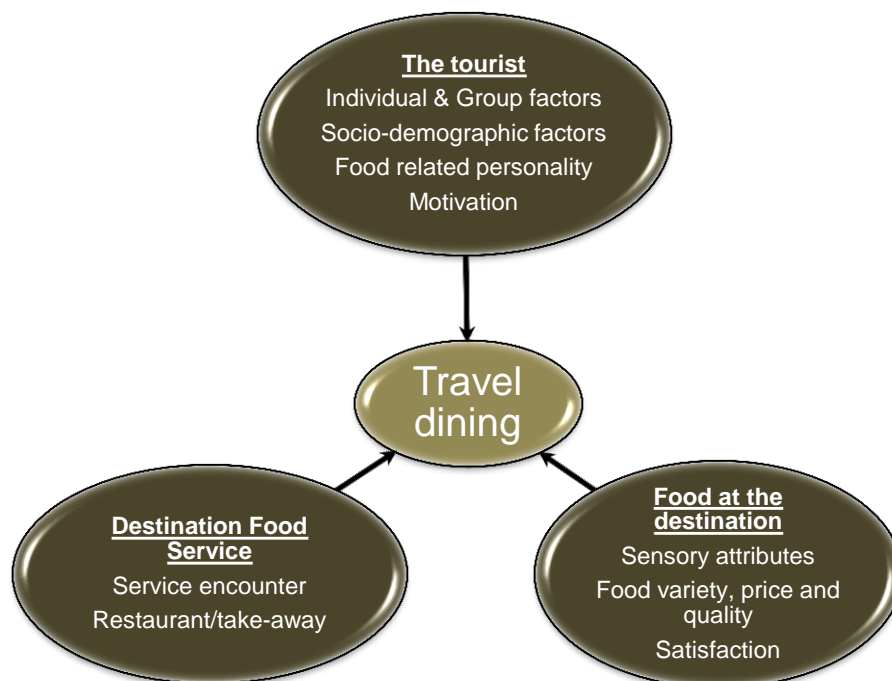


Figure 1: Factors affecting tourist food consumption

Source: Adapted from Mak et al. (2012:930)

2.1.1 The tourist

Consumer behaviour in tourism is a fascinating subject (George, 2008:169), and much research into tourism consumer behaviour is still needed (Swarbrooke & Horner, 2007:3). The main difference with tourism consumer behaviour for food consumption is that the consumer is on holiday; away from his/her home environment and everyday life, motivations or expectations will be different. The purchase of food and beverages for holiday purposes are therefore part of the holiday experience. For nature-based tourists, part of the holiday experience is the purchase of food and beverages outside the park.

2.1.1.1 Individual factors

No two people are alike, even if they share the same background or are the same gender or age. People may share similarities, but have different opinions and perceptions (George, 2008; Kumar, 2010; Boshoff & Du Plessis 2009; Swarbrooke & Horner 2007; Hoyer & MacInnis, 2010).

Individual factors will, thus, be different for every person. These factors include perception, attitude, personality, and lifestyle. Individual factors have an affect on food and beverage consumption in terms of variety seeking, satisfaction, price consciousness and quality-consciousness.

2.1.1.2 Group factors

All consumers belong to different groups of society, whether it is in terms of social groups, interest groups, or family groups. As part of these different groups, consumers are influenced by different norms, values, habits, rules, and regulations (Blythe, 2008:190; Boshoff & Du Plessis, 2009:78; Kumar, 2010:222). There is a strong link between individual and group factors. Group factors consist of culture, religion, reference groups, social class/status, and family group and family life cycle. Group factors have an affect on food and beverage consumption in terms of choice and variety, pricing and discounts offered and value for money.

2.1.1.3 Socio-demographic factors

Socio-demographic factors commonly include variables such as age, gender, marital status, education level, occupation, and household income to reflect the social, economic, and demographic status of an individual (Mak *et al.*, 2012:931). These socio-demographics affecting a consumer's behaviour are unique to each consumer (Kumar, 2010:223). Socio-demographic factors have an affect on food and beverage consumption in terms of satisfaction, variety, quality-consciousness, pricing, service efficiency and quality of meals.

2.1.1.4 Food-related personality types

Food-related personality traits have begun to be recognised as important psychological variables affecting tourist food consumption (Chang, Kivela & Mak, 2010:993; Mak *et al.*, 2012:932). These traits exert a pervasive influence on a broad range of food-related behaviour (Kim, Eves & Scarles, 2009:430). The distinction between “neophobic” and “neophilic” tendencies in taste suggests that consumers have a natural tendency to dislike or suspect new and unfamiliar foods (neophobic) and, yet, also a tendency to search for novel foods (neophilic) (Chang *et al.*, 2010:993; Kim *et al.*, 2009:430; Mak *et al.*, 2012:932). People generally prefer to eat that with which they are familiar. Tse and Crofts (2005:968) state that tourists from high UAI countries (such as Germany and France) who are on short visits or those visiting for the first time prefer familiar foods and a limited range of culinary offerings. Chang *et al.* (2010:993) indicate that food habits are recognised as learned behaviour and, as such, are ongoing and resistant to change. It is important, therefore, that parks recognise the fact that most consumers prefer food with which they are familiar, which could extend to food restaurant and shop brands.

In terms of food consumption, Kim *et al.* (2009:425) found that motivational factors included exciting experience, escape from routine, health concern, knowledge, authentic experience, togetherness, prestige, sensory appeal, and the physical environment. Mak *et al.* (2012:933) found

food motivators to be physical, cultural, interpersonal, and status and prestige. The physical aspect refers to the act of eating to sustain the body, taking into account the taste and sensory appeal. Culture involves the experience of new cultures through food. The interpersonal aspect is the social aspect of food consumption, and lastly, status and prestige are affected in terms of building knowledge of new food types (Mak *et al.*, 2012:933). Food-related personality types have an affect on food consumption in terms of choice, variety of meals and quality. Thus the following hypothesis was derived:

2.1.2 Food at the destination

Unlike other travel activities and attractions, tourism dining is an art form that gratifies all five human senses – visual, tactile, auditory, taste, and olfactory (Kivela & Crofts, 2006:356). All tourists have to eat when they travel and, thus, engage in some form of travel dining. The significance of travel dining in the travel experience is demonstrated not only in its basic function as nourishment, but also in its various forms of benefits that enhance the overall travel experience (Chang *et al.*, 2011:307). Regardless of whether or not gastronomy is the tourist's main attraction, it is evident that it provides a source of enjoyment and opportunities that will have pleasant memories for the tourist (Sánchez-Cañizares & López-Guzmán, 2012:230). Overall, food at a destination can, therefore, be interpreted as a “peak touristic” experience, instead of merely being a “supporting” experience (Chang *et al.*, 2011:307). Food and beverage consumption has become important as part of the tourist experience, and the importance of food and beverages at the destination as part of the “peak experience” is vital.

Sensory perceptions play a major psychological and physiological role in appraisal and appreciation of food, as with other experiences at a destination (Kivela & Crofts, 2006:355). Sensory factors lead to food choice (Kim *et al.*, 2009:427), and experience of local food and beverages is satisfied through smell, taste, and visual

image (Mak *et al.*, 2012:929). Although sensory attributes are important, initial research into food choice did not take into consideration the psychological concepts of food choice. Initially, the “sterile taste booth” method was applied to develop a description of sensory product properties (Köster, 2009:71). In the past two decades of research into food, choice has been extended from sensory to the direction of consumers’ insight and to identifying the influences of physical and social factors, expectation, and meal composition (Köster, 2009:71). It is very important for any destination offering food to realise that although consumers eat the food available to satisfy their physiological need, many other factors are important in determining whether this food has sated their needs.

Believing that all tourists at parks have the same needs and wants with regard to food or that food preference and choice do not change is a fallacy and results in tourists being dissatisfied with food and beverage operations. Consumers have become more health-conscious, and as such, food choice and preferences have changed. Since SANParks does not offer a variety of restaurants and shops, it is important to offer a variety of food products in order to cater to tourists’ needs in terms of meal options. Chang *et al.* (2011:312) suggest that variety and diversity of food would add great value to the travel dining experience. Variety in terms of meal choices, as well as diversity of meals within a trip, is regarded as a necessary component of the dining experience (Chang *et al.*, 2011:312; Quan & Wang, 2004:301).

Price also plays an important role in determining the satisfaction of consumers with reference to the food and beverage operations of a destination. It is important that tourists do not feel as if they are being charged too much for food and beverage products, since they have no other options but to buy from park shops. Satisfaction arises from the perceived attributes of the destination matching expectation, which

means that each component of the tourist experience contributes to tourist satisfaction (Quan & Wang, 2004:300). Quan and Wang (2004:300) further state that the degree to which each component contributes is dependent on the types of expectations and tourists’ own adaptability to disappointment. Johns and Pine (2002:125) propose that customers assess their satisfaction through sets of attributes and that the expectancy-disconfirmation paradigm (EDP) is the principal theory linking customers’ attitudes to attributes. Aspects such as service quality, value for money, and quality of products will determine whether tourists are satisfied with the food and beverage operations or not. EDP represents satisfaction as a process of evaluation and suggests that satisfaction is the result of discrepancy between expectations and perceived performance (Chang *et al.*, 2011:309). Satisfaction with the travel dining experience is closely linked to the establishment at which dining takes place. This physical environment forms part of the third factor in food consumption in tourism, which is the destination food service.

2.1.3 Destination food service

Expectations of food consumers are formed by consumers’ general knowledge and their past experience; perceived performance of the travel dining experience may include the food itself, the ambience of the restaurant, and the encounter with service staff (Chang *et al.*, 2011:309; Kivela & Crofts, 2006:356). Tourists often place considerable emphasis on how they feel at a destination and how they experience what the destination offers. Carefully selecting a special restaurant and food might fulfil a personal desire (Kivela & Crofts, 2006:355). The service level expected is associated with the consumer’s perceptions of how developed the destination is (Chang *et al.*, 2011:313).

Thus the following hypotheses were derived from the literature review and will be assessed:

Table 1: Hypothese derived from literature review

Aspects influencing Restaurant Facilities	Aspects influencing Shop facilities
H1a: There is a relationship between quality of meals and restaurant operations	H1b: There is a relationship between major changes in parks and shop operations
H2a: There is a relationship between service efficiency and restaurant operations	H2b: There is a relationship between freshness of food and shop operations
H3a: There is a relationship between menu variety and restaurant operations	H3b: There is a relationship between fast moving goods and shop operations
H4a: There is a relationship between pricing options and restaurant operations	H4b: There is a relationship between existence of brands and shop operations
H5a: There is a relationship between product options and restaurant operations	H5b: There is a relationship between serving a variety of markets and shop operations
H6a: There is a relationship between value for money and restaurant operations	H6b: There is a relationship between buying provisions before visiting parks and shop operations
H7a: There is a relationship between pricing and affordability and restaurant operations	H7b: There is a relationship between shops being expensive and shop operations
	H8b: There is a relationship between paying higher prices and shop operations
	H9b: There is a relationship between discounts for woldcard holders andf shop operations
	H10b: There is a relationship between separate selling of curios and shop operations



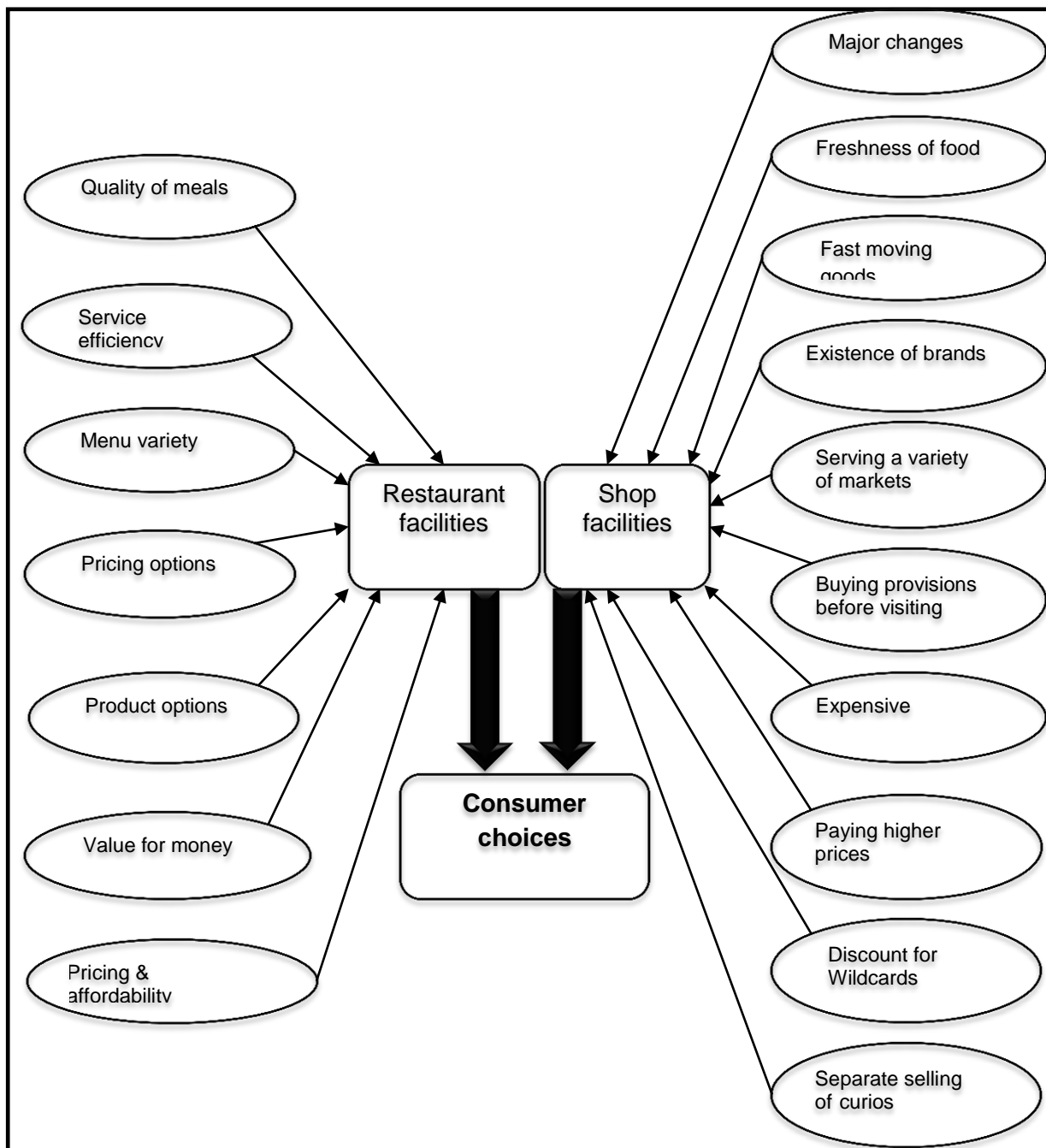


Figure 2: The conceptual model (A) for concessionaire food and beverage operations (including restaurants and shops) in SANParks

Consumer choices relating to restaurant and shop facilities were identified after a literature review of tourist food consumption and findings related to satisfaction levels with food and beverage operations in SANParks.

3. Methodology

3.1 Questionnaire design and sample selection

Various factors that were important to this study, but that did not appear in previous models, were identified for testing as part of the empirical study. The questionnaire for this survey was developed after an informal meeting with SANParks and utilising

available literature (Quan & Wang, 2004; Chang *et al.*, 2011; Sánchez-Cañizares & López-Guzmán, 2012; Mak *et al.*, 2012; Kim *et al.*, 2009). The questionnaire was posted on the SANParks website and was available to all users for a period of two months. The purpose of the questionnaire was to determine the factors that influenced tourist food consumption. There were 5 464 useable responses for this study which is an excellent response rate in the field of tourism. The questionnaire included three sections, namely; demographic information, perspectives regarding dining preferences and perspectives regarding shop facilities.

Section 1: Demographic information

The demographic section included questions on gender, year of birth, home language, marital status, province of residence, highest level of education, and gross annual income.

Section 2: Perspectives regarding dining preferences (restaurants)

In this section, respondents were asked their perspectives regarding the importance of aspects related to dining at restaurant facilities in national parks. Perspectives such as value for money, variety of product options, quality of meals, and service standards were identified. A five-point Likert scale was used to determine the level of importance of factors related to dining, where 1 was not at all important and 5 was very important.

Section 3: Perspectives regarding shop facilities

This section asked respondents to rate their level of agreement with regard to comments related to the offerings of shop facilities in national parks. A five-point Likert scale was used to rate the level of agreement for each statement related to the use of shop facilities in national parks, where 1 was totally disagree and 5 was totally agree.

3.2 Data Analysis

The descriptive statistics focused on the demographic profile of tourists that participated in the survey, a factor analysis identified restaurant and shop factors and structural equation modelling was used to

determine the relationships between factors and food and beverage operations in order to develop the model.

3.2.1 Descriptive analysis

An analysis of the demographics of respondents was constructed as well as a factor analysis of the variables obtained from Sections 2 and 3 of the questionnaire. For the purpose of this study, a factor analysis was used to determine the variables related to dining preferences at restaurant and shop facilities. This information will assist in the construction of a concessionaire model for food and beverage operations in SANParks.

3.2.2 Structural equation model (SEM)

Data was analysed by means of a structural equation model (SEM). This model was used to determine the correlation between the factors identified for food preferences as well as the correlation between factors and food and beverage operations (namely, restaurant and shop facilities).

4. Results

4.1 Profile of respondents

The demographic profile of respondents indicated that majority were male (60%), aged between 51-60 years (29%), spoke English (48%), were married (80%), residing in the Gauteng Province (42%), with the highest level of education being a Diploma (27%) and did not wish to disclose their annual income (22%). This sections found that majority of respondents preferred self catering chalets (51%), bought some items in the park shops (42%), would not make use of bed and breakfast accommodation in the park (55%) and were not wild card holders (67%). This coincides with previous research conducted by Slabbert and Van Loggerenberg (2012:7) and Du Plessis *et al.* (2011:6) which indicates similar demographic results for nature-based product studies in South Africa.

4.2 Factors related to restaurant and shop facilities in SANParks

The factor analysis focused on exploring the perceived importance of factors relating to restaurant and shop facilities in SANParks. Firstly, the seven restaurant and take away aspects yielded two factors, namely, 'Satisfaction' and 'Variety'. 'Satisfaction' comprised of service efficiency and quality of meals. 'Variety' included factors such as different pricing options, product options, value for money, pricing affordability, and menu variety. "Satisfaction" yielded a significantly higher mean than "Variety", which indicates that satisfaction with park restaurants is more important than variety of offerings. Satisfaction affects the travel dining experience and the food itself (Chang *et al.*, 2011:309) and is, therefore, an important factor to consider when determining food and beverage operations. Kivela and Crotts (2006:372) state that when tourists' expectations are met and/or exceeded, they are likely to return to the destination. Variety and diversity of food are important factors to consider when determining attributes that affect the evaluation of the travel dining experience (Chang *et al.*, 2011:311). Therefore, the satisfaction of tourists with regard to the food and beverage operations was affected by various factors, one of which is variety. This has a direct influence on standards, service delivery, staff training, etc.

Secondly, the 10 shop aspects, resulted in three factors which were "Retail Benefits", "Retail Pricing", and "Retail Experience". "Retail Benefits" constituted the focus on fast-moving consumer goods, products aimed at a variety of markets, separate curio sales, and discounts for Wild Card holders. The second factor, "Retail Pricing", included that shops were too expensive and preference for using park shops as opposed to exiting the park. Mak *et al.* (2012:929) indicate that price is one of the factors that affect food preference. Maubach *et al.* (2009:298) indicate that the most salient factor influencing the purchase of food products is price. The third factor, "Retail Experience", comprised purchasing provisions outside of parks as part of the holiday experience, that retail brands would enhance the experience that no major changes were required, and that shops had to focus on freshness of products. The mean value for "Retail Pricing" was slightly higher than "Retail Benefits" and "Retail Experience", which indicates that pricing was more important to park visitors. These factors led to the development of hypotheses that were tested in the modelling phase of this research. Table 1 below indicates the results of the factor analysis for restaurant and shop facilities.

Table 2: Results of the factor analysis for restaurant and shop facilities

Factors	Cronbach α reliability coefficient	KMO
Restaurant factors		0.777
Satisfaction	0.701	
Variety	0.693	
Shop factors		0.786
Retail Benefits	0.551	
Retail Pricing	0.457	
Retail Experience	0.576	

Reliability (Cronbach's α) was computed to verify internal consistency of aspects with each factor. Both restaurant factors and shop factors were deemed acceptable for the purpose of this study. Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) was above 0.7, which was acceptable.

Based on the results of the factor analyses the hypotheses were adapted to form part of the structural equation modelling:

H1c: There is a relationship between satisfaction and food and beverage operations.

H2c: There is a relationship between variety and food and beverage operations.

H3c: There is a relationship between retail benefits and food and beverage operations.

H4c: There is a relationship between retail experience and food and beverage operations.

H5c: There is a relationship between shops being too expensive and food and beverage operations.

H6c: There is a relationship between satisfaction and variety.

H7c: There is a relationship between satisfaction and retail benefits.

H8c: There is a relationship between satisfaction and retail experience.

H9c: There is a relationship between variety and retail benefits.

H10c: There is a relationship between variety and retail experience

H11c: There is a relationship between retail benefits and retail experience.

4.4 Structural Equation Modelling

After the factor analysis the model below was structured (Figure 3 below).

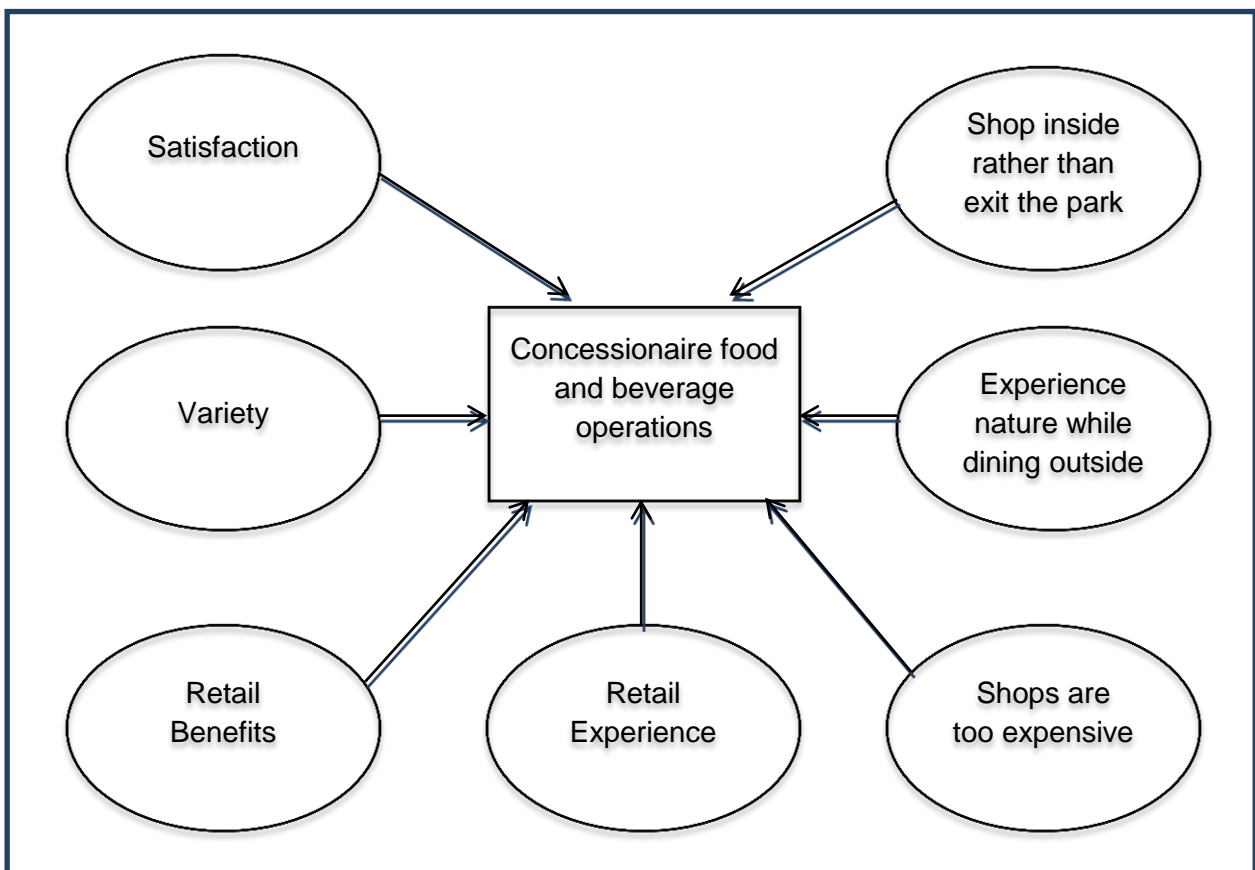


Figure 3: The conceptual model (B) for concessionaire food and beverage operations (including restuarants and shops) in SANParks

The conceptual model (B) in Figure 3 was constructed from the factor analysis, which identified that “Satisfaction”, “Variety”, “Retail Benefits”, “Retail Experience”, “shop inside rather than exit the park”, “experience nature whilst dining outside”, and “shops are

too expensive” might have an influence on consumer choices in nature-based products. Conceptual Model B was tested by means of a structural equation model (Figure 4).

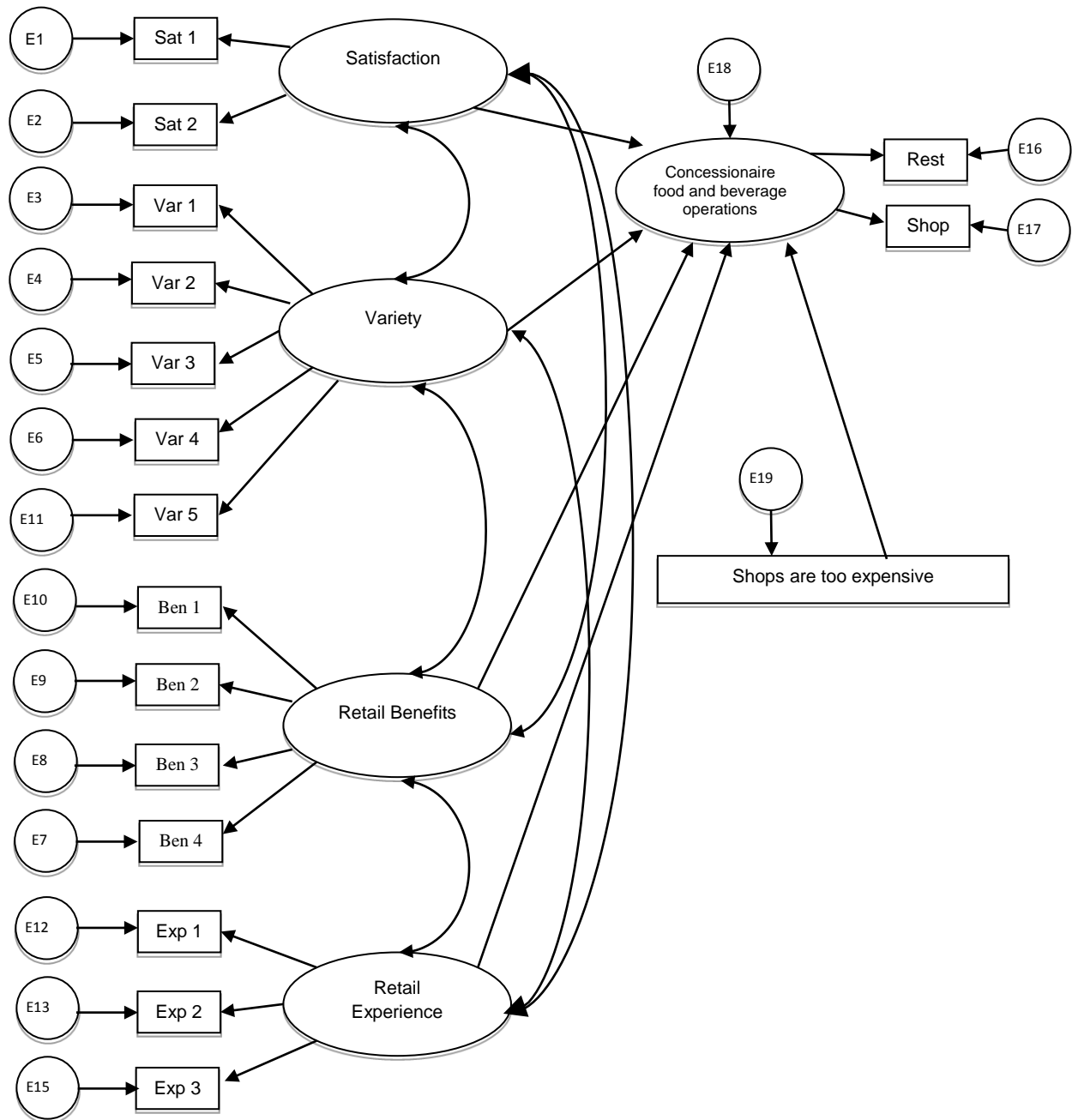


Figure 4: Concessionaire model for food and beverage operations in SANParks

4.4.1 Testing the hypothesised Structural Equation Model

Identification and definition of the latent variables were done in the literature chapter and focused on “Satisfaction”, “Variety”, “Retail Benefits”, “Retail Experience”, and “shops are too expensive”. Each latent variable consists of a set of observed variables. The measurement model was developed by identifying the latent constructs and assigning variables to each construct. The model was specified as a confirmatory factor analysis model. Maximum likelihood (ML) estimation was used to estimate the model. ML estimation is a technique for estimating parameters, in which the values that maximise the likelihood are chosen (Porkess, 2005:150). The structural equation model was constructed using covariance data.

Covariance is the measure of the linear relationship between two random variables (Porkess, 2005:66). For this study, the conceptual model contained seven components. The sample size was 5 464, which is large and will produce more stable solutions that are more likely to be replicable. A variety of estimation methods have been used in SEM to indicate how closely the correlation or covariance matrix implied by the hypothesised model conforms to the covariance matrix of the observed data, thus guiding attempts to find best-fitting models. In testing restaurant and shop operations, it was found that there was no difference between the two food service operations, and that they were therefore combined and tested as one aspect.

Table 3: Standardised regression weights estimate and p-label

				P-label
H ¹	Food and beverage	<---	Satisfaction	.000*
H ²	Food and beverage	<---	Variety	.000*
H ³	Food and beverage	<---	Retail Benefits	.011*
H ⁴	Food and beverage	<---	Retail Experience	.000*
H ⁵	Food and beverage	<---	Shops are too expensive	.238
H ⁶	Satisfaction	<-->	Variety	.000*
H ⁷	Satisfaction	<-->	Retail Benefits	.000*
H ⁸	Satisfaction	<-->	Retail Experience	.000*
H ⁹	Variety	<-->	Retail Benefits	.000*
H ¹⁰	Variety	<-->	Retail Experience	.000*
H ¹¹	Retail Benefits	<-->	Retail Experience	.000*

From Table 3, it is clear that the path coefficients of the individual items were statistically significant, with the exception of H⁵, where the relationship was not supported. The H¹, H², H³, H⁴, H⁶, H⁷, H⁸, H⁹, H¹⁰, and H¹¹ path coefficients were statistically significant for the hypotheses tested.

4.4.2 Goodness of Fit Test

The measures of fit can include a combination of criteria. For each measurement of fit, a decision as to what

represents a good enough fit between the model and the data must reflect other contextual factors such as sample size (a very large sample makes the chi-squared test overly sensitive), the ratio of indicators to factors, and the overall complexity of the model. These include the chi-squared test, the normal fit index (NFI), the relative fit index (RFI), the incremental index of fit (IFI), the Tucker-Lewis index (TLI), the comparative fit index (CFI), the expected cross-validation index (ECVI), the relative noncentrality index (RNI), and the root

mean square error of approximation (RMSEA). To assess the fit of the food service model, it is suggested that multiple

fit indices should be used to assess the model's goodness of fit.

Table 4 Goodness-of-fit indices

	Food service model
Chi-square	369.0230
DF	109
CMIN/DF	3.385
p-value	p<.000
CFI	.857

The hypothesised model was tested, and acceptable support was found for the hypothesised model, χ^2 (chi-squared)=369.0230 (n=5464, df=109, p<.000), comparative fit index (CFI)=.857, and root mean square error of approximation (RMSEA)=.078. According to Table 4, the fit indices of the model suggested that it was acceptable.

From Table 4, it is clear that the path coefficients of individual items were statistically significant, except that between "shops are too expensive" and "Food service". When analysing the path coefficients for the hypotheses, it is clear that the path coefficients for all hypotheses, except H⁵, were statistically significant.

4.4.3 Hypotheses supported

H¹ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between the "Satisfaction" and "food and beverage operations". This was supported by the standardised path coefficient of -.083 (p=.000), indicating a negative relationship. As a result, the more importance placed on satisfaction by consumers with aspects such as "service efficiency" and "quality of meals", the less likely it was that they would require retail brands.

H² was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Variety" and "food and beverage operations". This was supported by the standardised path

coefficient of .259 (p=.000), indicating a positive relationship. This suggested that the more important variety options were to consumers, the more they required retail brands. Variety includes "menu variety", "pricing affordability", "pricing options", "value for money", and "product option variety". These aspects would be satisfied by the introduction of retail brands, as their price, products, and quality are standardised. This was the only positive relationship between a factor and food service.

H³ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Retail Benefits" and "food and beverage operations". This was supported by the standardised path coefficient of -.096 (p=.011), indicating a negative relationship. This suggested that the more consumers agreed with aspects related to retail benefits being offered in shops, the less the need for retail brands. These aspects include "shops should focus on fast-moving goods", "Wild Card holders should receive discounts", and "shops should offer products aimed at a variety of markets". If these aspects were available in the shops and restaurants, there would be no need for a retail brand.

H⁴ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Retail Experience" and "food and beverage operations". This was supported by the standardised path coefficient of -.650 (p=.000), indicating a

negative relationship. This was the strongest relationship, and therefore, "Retail Experience" had the greatest influence on food service (as indicated in the ANOVA tables). The higher the level of agreement with aspects such as "purchasing provisions before leaving home" and "the shops should focus on fast-moving goods", the less the need for retail brands. If respondents were purchasing products before leaving home or en route to the park, they would not be making use of the shops, unless they required convenience items and, as such, would not feel the need to have a retail brand.

H⁶ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Satisfaction" and "Variety". This was supported by the standardised path coefficient of .657 ($p=.000$), indicating a positive relationship. This was the strongest positive relationship among factors, indicating that an increase in satisfaction would result in an increase in variety. The higher the level of importance of "quality of meals" and "service efficiency", the higher the level of importance of "pricing options", "menu variety", "product options",

and "value for money" would be. In order to be satisfied, variety was required.

H⁷ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Satisfaction" and "Retail Benefits". This was supported by the standardised path coefficient of .365 ($p=.000$), indicating a positive relationship. An increase in the importance of "Satisfaction" would result in an increase in the level of agreement with "Retail Benefits". Therefore, aspects such as "service efficiency" and "quality of meals", if considered important, would require shops to offer "fast-moving goods", "products aimed at a variety of markets", and "discounts for Wild Card holders".

H⁸ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Satisfaction" and "Retail Experience". This was supported by

the standardised path coefficient of $-.307$ ($p=.000$), indicating a negative relationship. Interestingly, the more important "Satisfaction" was to respondents, the less they agreed with the need for "Retail Experience" aspects. Therefore, the more important "service efficiency" and "quality of meals" became, the less likely respondents were to agree with "retail brands would enhance my experience" and "buying provisions before leaving home". This was an interesting aspect, as respondents were showing that if parks increased service efficiency and quality of meals, they would be less likely to purchase provisions before arriving at the park.

H⁹ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Variety" and "Retail Benefits". This was supported by the standardised path coefficient of $-.588$ ($p=.000$), indicating a negative relationship. If SANParks were to increase the variety aspects such as "product options", "pricing options", and "menu variety", the less likely respondents would be to agree with the

"Retail Benefits" aspects. These include "shops should focus on fast-moving goods" and "shops should have products aimed at a variety of markets".

H¹⁰ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between "Variety" and "Retail Experience". This was supported by the standardised path coefficient of $-.496$ ($p=.000$), indicating a negative relationship. Once again, an increase in variety options such as "product options", "pricing options", and "menu variety" would make it less likely for respondents to agree with the "Retail Experience" aspects such as "buying my provisions before leaving home" and "shops cater to my needs, and no change is required". Once again, SANParks has an opportunity to change the dissatisfaction of respondents with shops and restaurants by increasing variety aspects.

H¹¹ was confirmed at the 5% significance level, thereby supporting the hypothesised relationship between “Retail Benefits” and “Retail Experience”. This was supported by the standardised path coefficient of $-.677$ ($p=.000$), indicating a negative relationship. This was the strongest negative relationship, indicating that there was little support between “Retail Benefits” and “Retail Experience”. Therefore, the more respondents agreed with “Retail Benefits” aspects, the less they agreed with “Retail Experience” aspects. An increase in “shops should focus on fast-moving goods” and “products aimed at a variety of markets”

would mean a decrease in the likelihood that respondents would “purchase provisions before leaving home” and “retail brands would enhance my experience”. This indicates that, should SANParks change the shops and restaurants to cater to the requirements of respondents, retail brands would not be as necessary.

The final model (Figure 5) was developed from the empirical investigation and consists of four quadrants.



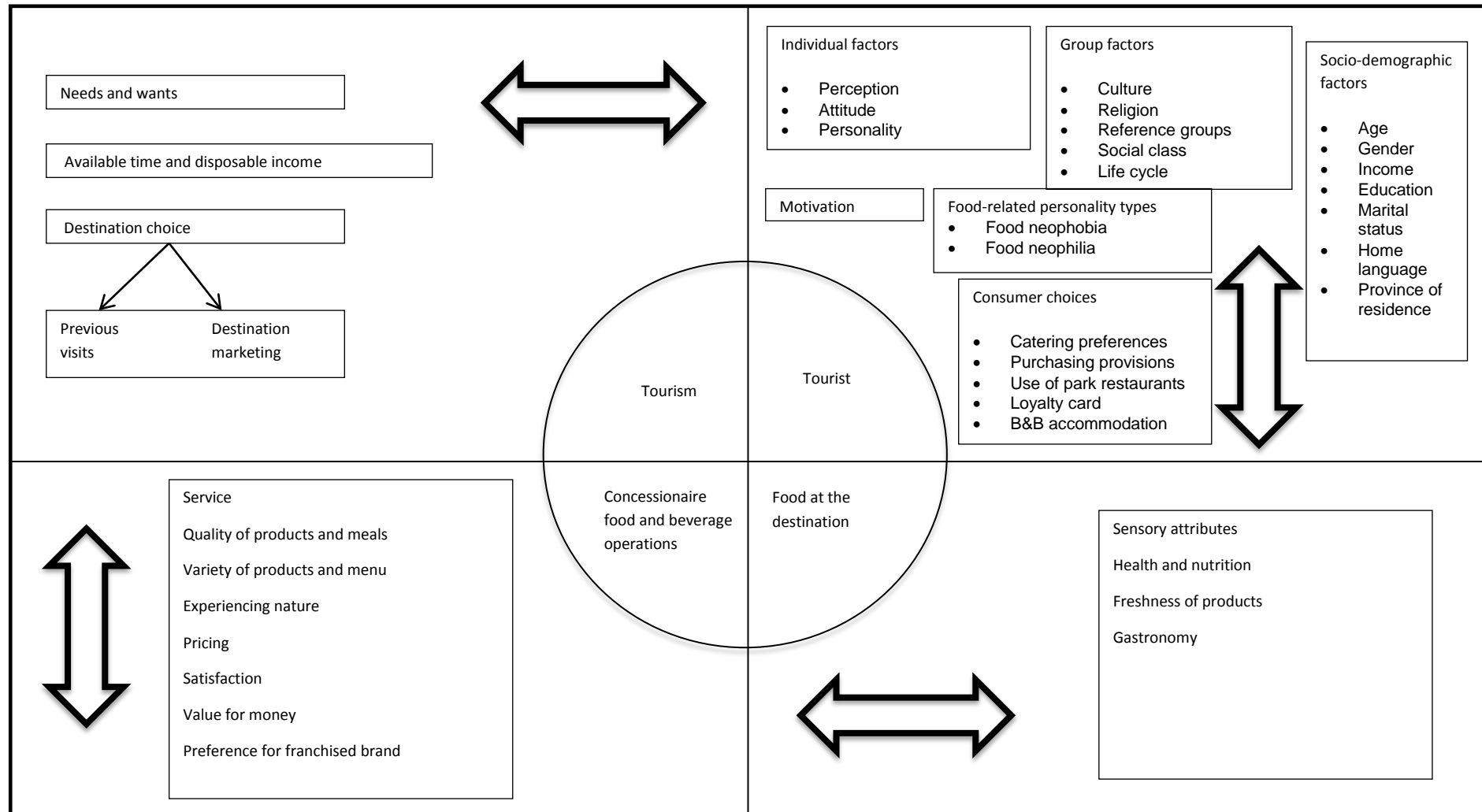


Figure 5: Concessionaire model for food and beverage operations for nature-based products

5. Conclusions

The final model (as indicated in Figure 5) was developed from the literature analysis and the empirical investigation. This model consists of four quadrants, namely, tourism, the tourist, food at the destination, and concessionaire food and beverage operations. Tourism needs to take place for there to be a tourist.

Tourism requires that needs and wants are identified, that time and money are available in order to satisfy these needs and wants, and that, finally, a destination is chosen. The destination is chosen on the basis of either previous visits to a destination or destination marketing for a new destination. Once a need and want for tourism have been established, the tourist will determine the destination and type of tourism, based on tourist consumer behaviour choices. With reference to the proposed model, this will be determined by motivation, socio-demographic factors, group factors, individual factors, consumer choices and food related personality types. Tourism therefore affects the tourist in terms of destination choice which is in turn affected by consumer choices.

Tourist consumer behaviour with regard to food is affected by factors such as individual factors, group factors, socio-demographic factors, motivation, food-related personality types, and consumer choices – all of which determine food choices and preferences. Tourist consumer behaviour is affected by the type of tourism entered into as well as food at the destination. Health and nutrition, sensory attributes, freshness of products and gastronomy all contribute to the decision the tourist will make in terms of destination. It is important to understand that this model is related specifically to destinations such as SANParks as all food and beverage operations are within the enclosed Park and dining outside the Park is not possible. Therefore the food and beverage operations are of utmost importance and will contribute significantly to the choice of destination. This model can be adapted to other destinations, but the food and beverage operations would be

only a small part of the contributing factors for destination choice.

Food at the destination is affected by factors such as sensory attributes, health and nutrition, freshness of products, and gastronomy. Due to the fact that food and beverage operations within SANParks form the only option in terms of restaurants and shop facilities, this aspect is important in terms of destination choice. The type of food and beverage operations available will affect the concession food and beverage operations in terms of service, quality of products and meals, variety, pricing, satisfaction and value for money.

Finally, concessionaire food and beverage operations are affected by factors such as service, quality of products and meals, variety of products and menus, experiencing nature while dining, pricing, satisfaction, value for money, and preference for a franchised brand. It is important to note that tourism factors that affect the tourist are also affected by tourist consumer behaviour choices. The tourist consumer behaviour choices affect the food choices at the destination, but are also affected by the food choices. Food at the destination affects the concessionaire food and beverage operations and is affected by concessionaire food and beverage operations. Lastly, concessionaire food and beverage operations affect tourism and are affected by tourism. Tourism affects concessionaire food and beverage operations in terms of previous visits to the destination as well as destination choice.

This model proposes a holistic view of tourism in respect of food and beverage operations for nature-based products. It will allow SANParks to determine what it is that affects the decisions of tourists with respect to destination choice specifically regarding food and beverage operations at a destination. In order for the model to be effective, all four quadrants need to be assessed and utilised. SANParks must understand the tourist's decisions regarding the type of tourism chosen, the consumer behaviour of tourists in terms of food and beverage operations and the requirements for concession food and beverage

operations. Decisions on future food and beverage concessions within SANParks should take the consumer behaviour of tourists visiting SANParks into consideration. The model identifies the factors which tourists found important in terms of food at the destination and as such provide a framework from which SANParks can identify the best fit concessionaire. Factors such as service, quality of products and meals, variety of products and menu, pricing, satisfaction, value for money, preference for a franchised brand and freshness of products all indicate the measured factors which tourists find important. Therefore SANParks should identify concessionaires which are able to best offer these factors in order to improve the state of restaurants and shops within Parks. This model can therefore be used to provide an interpretation of what is required from concessionaires within SANParks.

Based on this research, the paper makes the following contributions:

- The paper analysed the food and beverage preferences and needs of consumers within a nature-based setting
- The paper determined what tourists regard as important in terms of food and beverages operations
- The paper makes a contribution to the literature regarding tourist consumer behaviour for food and beverages
- The paper proposes a model for food and beverage operations for nature-based products.

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