The impact of e-tolling on the recreational spending of people living in the Vaal Region

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ABSTRACT

The *primary objective* was to ascertain whether implementation of the e-tolling system will influence the spending on recreational activities by people staying in the Vaal Region. Thus the aim was to assess whether an incremental rise in expenses, leading to a decrease in available disposable income will impact people's decisions to travel outside their residences to visit and engage in leisure destinations and activities respectively.

A questionnaire was developed and distributed with the primary objective of determining whether people within the Vaal Region are aware of the costs associated with travelling using the e-toll Gauteng freeways, and whether it will have an impact on their decisions to travel from their respective residences to leisure properties elsewhere. It also probed the respondents for the type of leisure activities they engage in, frequency of visits and the reasons for participating in the respective activities.

The study shows that the e-toll project will inevitably, from a monetary perspective, affect all road users travelling from the Vaal Region to the greater Johannesburg areas.
This is significant and confirms that the e-toll project will be perceived to have an impact on people's available and disposable income. With the implementation of the e-tolling project seemingly imminent, businesses and consumers will feel the belt tighten in the leisure and recreational (and in particular the casino) industry, which is dependent on the availability of disposable income, to be ultimately affected.

Trends with regards to leisure activities were identified along with recommendations for future research.

Key words: Leisure, recreation, gambling, casino, e-toll, Vaal Region, disposable income.

CHAPTER 1

Problem statement

1.1 Introduction

Leisure activities can be described as any form of activity voluntarily undertaken by an individual in their spare-time (Boag *et al.,* 2003:14) other than work (Anon., 2010:2). With the increasing pressure of work, together with limited time and income available, engaging in recreational activities is an important determinant of a healthy lifestyle (Anon., 2010:3).

With the recent economic downturn, high food, fuel and utility costs, the disposable income of people has decreased. The impact of the implementation of the e-tolling system, which now seems imminent, may include higher transport, freight, distribution and commuting costs (Walsh, 2011:2) which will lead to the dilution of the amount of income left for recreational activities.

The research done in this mini-dissertation aims to ascertain whether the e-toll project will have an influence on the recreational spending of people residing and participating in leisure activities in the Vaal Region.

1.2 Problem statement

Leisure can be defined as a set of activities that individuals participate in during their free time; free from the obligations of work (Hurd & Anderson, 2010) and undertaken voluntarily by the individual in their spare-time (Boag *et al.,* 2003:14). Regarded as a leisure activity, gambling is defined as the act of betting money with the possibility of winning or losing (Business Dictionary, 2013). This leisure activity is a popular pastime enjoyed by many with its origins going as far back as during the age of cavemen. In Gauteng, South Africa gaming revenues generated equated to R6 billion for the 2011/2012 financial period (Maphai & Collins, 2012:18). Responsible for employing 10,726 people within the Gauteng province alone, the casino industry can be regarded as economically significant.

The e-toll project commissioned by the South African National Road Association (SANRA) to upgrade and alleviate congested highways in Gauteng (scheduled to be in operation by February 2012), has been subject to fierce opposition from various parties and associations including the Democratic Alliance (DA), Opposition to Urban Tolling Alliance (OUTA), Cosatu, Automobile Association and Justice Project SA. The project, despite claims by SANRA that it will create some 7,000 jobs by 2030 (Rasool, 2011), has been criticised for the high tariffs gazetted in April 2012, thus having possible

long term economic consequences. The imminent increase in costs for transport and logistics as well as the subsequent increase in inflation, is contributing to this directly. The economic impact of this project has been widely commented on with the consumer expected to absorb the cost: directly by paying the prescribed e-toll fees and indirectly by the increased costs of goods as well as transport and freight (Walsh, 2011:3).

In a press release during April 2012 listed on their website, the Consumer Goods Council of South Africa (CGCSA) indicated that for some of their 11,000 member companies', transportation costs account for between 20% and 30% of total expenses. The e-toll project would have a detrimental effect on overheads with small businesses being hit the hardest. This is further augmented by continuous rise in oil prices and increase in the fuel levy scheduled to be implemented by mid-2013.

There is a lot of speculation and controversy with regards to the e-tolling project and after months of legal battles (despite of the Gauteng High Court presided by Judge Louis Vorster in January 2013 granted OUTA application to appeal the e-toll project), implementation seems imminent. In February 2013 the Gauteng Premier dismissed Cosatu's request for a referendum (on whether e-tolling should be implemented). There is a lot of public interest as evidenced in the fact that OUTA was able to raise R8 million, making it the highest amount of capital raised for a public funded case (Duvenage, 2013).

In addition and prior to the tariffs being published in the Government Gazette on 13 April 2012, the limit for tagged and non-tagged users was stated to be set at an acceptable R0,30 and R0,58 per kilometre respectively (Clark, 2012). The rates published in the Government Gazette in April 2012 for a class A2 vehicle (light motor vehicle) were listed at R3,00 and R5,80 per registered and non-registered e-tag user respectively (900% more than initially stated).

With the economic downturn experienced over the last couple of years, the way people spend their income on leisure and recreational activities and in particular casino entertainment, has changed significantly. Not only are people more selective as to which type of leisure activity they are willing to spend money on, but also are influenced by the geographical location of properties.

Despite the casino industry being somewhat resilient to the economic woes of the country, rising unemployment rates and increasing utility costs are factors that will have a negative impact on any sector (Palenik, 2011). South Africa was, interestingly, one out of nine regions that did not report a decline in casino gaming revenues before, during and after the recession.
The cost of petrol from January 2012 until January 2013 increased by 11% and is predicted to rise by a further 12% by March 2013 (Automobile Association update, 2013).

With the imminent implementation of the e-tolling project, businesses and consumers will feel the belt tighten when looking at the entertainment industry (casinos in particular), which is dependent on the availability of disposable income and will thus be ultimately affected.

1.3 Objectives of the study

The *primary objective* is to ascertain whether the implementation of the e-tolling system will influence the spending on recreational activities (such as gambling) by people living in the Vaal Region. The aim is to assess whether an incremental rise in expenses, which will lead to a decrease in available disposable income, will have an impact on travel decisions made to visit leisure destinations and engage in leisure activities.

The *secondary objectives* will be to:

- Ascertain the participant's preferred choice of leisure activities and the reasons for engaging therein.
- Determine the frequency of visits to leisure destinations, including casinos, by the participants.
- Qualify the amount of income spend on leisure activities (per visit) by the participants.
- Ascertain how people are informed about the leisure activities they choose to engage in.

1.4 Scope of the study

The study will take place in leisure areas situated in the Vaal Region and will assess the willingness of people to spend disposable income on recreational activities.

1.5 Research methodology

The study will consist of a literature review section and an empirical study.

1.5.1 Literature study

The literature study will define leisure as an activity. It will also discuss the different forms of leisure activities (including the theories of leisure) and the factors that influence people's choices to participate in leisure activities as well as the choice of venues. It will provide an overview of the casino industry in Gauteng and its relevance to the economy.

In South Africa Gambling was legalised in 1996 through the inception of the National Gambling Act No. 33 of 1996 with the National Gaming Board established in 1997 (Department of Trade and Industry, 2011:31) and became fully operational in 1998 when the CEO took office.
With a national maximum quota of forty casino licenses available of which thirty-seven have been allocated, Gauteng has a total of seven casino group holding licenses (with the following properties situated outside the Vaal Region:

- Carnival City Casino and Entertainment World (Brakpan): Sun International (South Africa) Ltd.
- Emperors Palace Hotel Casino and Convention Centre (Kempton Park): Peermont Global (Pty) Ltd.
- Southern Sun Gold Reef Tsogo Sun
- Southern Sun Montecasino (Fourways): Tsogo Sun
- Morula Casino and Hotel (Karenpark): Sun International (South Africa) Ltd.
- Silverstar Casino (Muldersdrift): Tsogo Sun

With the exception of Morula Casino and Hotel, all casinos listed above are situated within the central Gauteng region and will be used as basis for ascertaining the primary objective.

In Gauteng (2011/2012) alone the total amount of revenue generated from casino activities equated to R755,079,722 and accounted for 41,1% of all South African casino revenue (Maphai and Collins, 2012:8).
According to the Ipsos Markinor research, commissioned by the Casino Association of South Africa (CASA) in 2011, the profile of gamblers and their behaviour in South Africa was denoted as follows (Mathai, 2011:8):

Demographic of respondents:

- 40% Black people
- 38% White people
- 13% Coloured people
- 9% Asian people

Out of the 61% that responded in the 2011 survey undertaken by CASA (Mathai, 2011:8), 23% stated that they would gamble once a month and 38% stated that they would gamble once a week with intent to spend R600 or less per visit. 77% of the respondents indicated that they owned motor vehicles. In the Department of Trade and Industry's 2010 report, the age of gamblers ranged between 26 and 45 years.

For the purpose of this paper, and taking into consideration the e-toll discounts applicable to users, the period that casinos are most frequented, will be assumed as follows:

- Fridays: 6pm to 6am.
- Saturdays, Sundays and all statutory public holidays: 6am to 6pm.

The study will also be preceded by a synopsis and timeline of the e-tolling project and will entail identifying and assessing routes to the five casinos listed above as well as associated travelling costs.

1.5.1.1. E-toll users

According to the South African National Road Agency State Owned Company Limited (SANRA SOC L), there will be five types of e-toll users: Registered e-tag users, Non-registered e-tag users, Vehicle License Number (VLN) users, Alternate users and Day-pass users (South Africa, 2012:6). As denoted in the 13 April 2012 Government Gazette, the tariff listed pertains to all motor vehicle classes and users. For the purpose of this paper the A2 (light motor vehicle) class of vehicles will be assumed as the preferred mode of transportation.

Travelling from the Vaal Region to the respective casinos listed above, a road user is expected to traverse the following e-toll points for a return trip:

- Gold Reef City via the Golden Highway (N1): a road user is expected to traverse one e-toll point. For the purpose of this paper it will be considered negligible.
- Emperors Palace and Carnival City via the Golden Highway (N1): a road user is expected to traverse 11 points with a registered and unregistered user expected to pay an additional R23,45 and R45,35 respectively (South Africa, 2012:9).
- Montecasino via the Golden Highway (N1): a commuter is expected to traverse 13 e-toll points with the travelling fees estimated to be R21,30 and R41,20 for registered and non-registered road users respectively.
- Silverstar Casino via the Golden Highway (N1): a road user is expected to traverse 7 e-toll points.

1.5.2 Empirical study: Research methodology

A quantitative study in the form of questionnaires (consisting of leading, importance, Likert-scaled, dichotomous and rating questions) will be formulated and distributed manually to people staying in the Vaal Region who choose to participate in leisure and recreational activities.

The questionnaire will be divided into four sections and denoted as follows:

1. Section one will assess the demographic profile of respondents as well as the travel frequency to recreational and casino properties outside the Vaal Region.
2. Section two will assess the factors that attract people to casinos and engage in associated activities.
3. Section three will identify the level of information respondents have of e-tolling and their level of understanding on the project's possible effects on their disposable income (primary objective) and will comprise of Likert-scaled questions.
4. Section four will probe participants for the factors that motivate people to participate in various leisure activities, including the inclination to visit casinos (secondary objective) and will comprise of Likert-scaled questions.

The above-listed method of sampling, specifically simple random sampling where anyone who visits the leisure areas has an equal chance of being included in the sample (Welman, 2010:56). This method is relatively less time consuming, less costly and adequately representative of the market that the study wishes to assess (Bless *et al.,* 2011:99).

Results will be analysed by the Statistical Consultation Service of the North-West University (NWU) to ascertain causality between the implementation of the e-tolling system and its influence on recreational spending on leisure activities.

1.6 Limitations of the study

People residing and working within the Vaal Region would, in comparison to people staying in the Greater Johannesburg areas, have a limited amount of recreational activities and facilities to participate in and visit respectively. Thus people staying in the Johannesburg areas will have a greater frame of reference to draw from when completing the questionnaire.

1.7 Chapter classification

The study is divided into four chapters and is listed as follows:

Chapter 1: Introduction and problem statement

Encapsulated in the first chapter are a brief overview of recreation and the various classifications of leisure activities, including the gambling industry within Gauteng, and its relevance to the economy. It will also provide a description of the e-toll project to be implemented in Gauteng and the controversy around it. From this the problem statement, primary and secondary objectives will be listed, including the research methods to be undertaken.

Chapter 2: Literature study

The literature review in Chapter 2 will provide an overview of leisure and recreational activities as well as a detailed summary of the casino industry in Gauteng and its contribution to the economy from a revenue-generating and employment perspective. This chapter will also include a synopsis of the e-toll project from the time it was announced to the South African public, through to when the tariffs were gazetted in April 2012. It will also include information relating to the decision by the High Court to grant OUTA an appeal towards averting implementation. The text will provide a detailed estimation of e-toll-related travelling costs which will be applicable to residents staying within the Vaal Region and commuting outside their respective residences to participate in leisure and recreational activities.

Chapter 3: Empirical study

The chapter describes what methods were used to undertake the empirical study, which includes how the sample was chosen, the measuring instrument was used, how it was administered as well as the statistical methods used to analyse the data obtained.

Research design

The research design pertains to the testing of the theory or hypotheses (Bless *et al.*, 2006:71). It can be described as a plan where respondents are identified and information is obtained from in order to make conclusions about the theory (Welman *et al.,* 2005:52-53). It specifies the statistical technique to be used and the sample group to be targeted.

Questionnaire

A survey in the form of a close-ended, cross-sectional questionnaire was used in the research study and comprised of leading, importance, Likert-scaled, dichotomous and rating questions.

Sample population

Questionnaires were distributed manually and randomly to people frequenting various leisure properties. The sample consisted of leisure guests visiting an indoor water park, an outdoor adventure golf course, a tenpin bowling alley, health club as well as hotel and conference delegates (occupying various hotels and guest houses situated in the Vaal Region).

Statistical analysis

The Statistical Consultancy Services of the NWU was approached to assist in the analysis of the data obtained. A quantitative and structured research study, classified as descriptive and explanatory statistics, was undertaken to attain the research objectives.
The validity of the questionnaire was assessed by calculating Cronbach's Alpha coefficients.

Chapter 4: Discussion

The findings of the questionnaire and conclusions derived will be discussed in this chapter.

CHAPTER 2
Literature study

2.1 Introduction

Leisure can be defined as a set of activities that individuals participate in during their free time; free from the obligations of work (Hurd & Anderson, 2010:10) and undertaken voluntarily by the individual in their spare-time (Boag *et al.,* 2003:14). People who participate in leisure activities believe that it will satisfy a need (intrinsically rewarding), will essentially be fun (O'Sullivan *et al*., 2006:62) and characterised by individual freedom (O'Sullivan *et al*., 2006: 339).
According to Hurd and Anderson there are three components to leisure as a concept that includes: (1) leisure as time (which refers to the time left once the obligations of work and other functions have been met), (2) leisure as an activity (which refers to when the activities are being undertaken) and (3) leisure as a state of mind (which refers to individual's perception of what he or she perceives as recreational activity (Patmore, 1983:5-6).

Participating in leisure activities on a regular basis not only provides balance in an individual's life, but has shown to result in a more positive outlook exhibited by the individual (O'Sullivan *et al*., 2006:339).

2.2 Types of leisure activities

Leisure and recreational activities can be divided into four main categories (O'Sullivan *et al*., 2006:4-16):

- *Sports / physical activity / fitness and well-being*: this may include individual or team-based activities in a structured (ruled-based) environment or in an informal setting ("weekend warriors") (O'Sullivan *et al*., 2006:265).
- *Social / hobbies* (which may include video games, social networking, collecting comics).
- *Art and cultural-based activities* (dancing, playing music, art, watching movies).
- *Service-based and spectator-based activities* (watching sports or music events, visiting a zoo, engaging in activities such as gambling); this may include activities with entertainment attributes (Zhou, 2005:27-26).

People participate in leisure and recreational activities for various reasons. These reasons may include: (1) the need for relaxation; (2) escape from personal and interpersonal environments (Williams, 1996:11) including work, social, family pressures (O'Sullivan *et al*., 2003:321), (3) social interaction; (4) the need to reinforce meaningful relationships including family bonding (O'Sullivan *et al*., 2006:339); (5) the attainment of self-actualisation goals; (6) improved health benefits (which stems from an increased awareness of the importance of good health); (7) the need to experience excitement and adventure (with reference to the *Flow theory* (Hurd & Anderson, 2010:12), which indicates that individuals participating in activities below their skill level, will become bored) and (8) the need for community development (leisure and recreational activities facilitate the learning and development process concerning the youth. (South Africa, 1995).

2.3 Theories of leisure

The way people spend their time with regard to how society perceives particular activities as acceptable and/or unacceptable can be categorised by *Nash's Pyramid of Leisure theory* (Hurd & Anderson, 2010:12). The lowest form of leisure refers to acts against society with the highest referring to creative engagement (Hurd & Anderson, 2010:10-12). According to Csikszentmihalyi's *Flow theory* (Hurd & Anderson, 2010:11-12) people choose to participate in particular leisure activities that match their current skill level. A mismatch of skill and activity can be characterised by either anxiety (where skill level is low and challenge is high) or conversely (where skill is high and challenge is low), which may result in boredom (Nakamura & Csikszentmihalyi, 1998:89-91). According to studies undertaken by Csikszentmihalyi, people who had attained a "state of flow"' denoted characteristics such as immediate feedback, sense of control, feelings of deep concentration and a feeling of where time stops (Archibald, 2008:4).The *Optimal Arousal theory* implies that people seek to participate in leisure activities to attain a stimulus that reduces boredom (Hurd & Anderson, 2010:14).

2.4 Factors influencing participation in leisure activities

Although most people have time at their disposal, there are several factors influencing the choice of activities they respectively choose to undertake. These factors can be classified into push and pull factors (Zhou, 2005:7). Push factors are components that compel someone to satisfy a particular

need, whilst pull factors are key benefits or attributes which a venue, destination and activity offers (attractions). This will be discussed later on.

Push or socio-psychological factors may include aspects or features that satisfy a particular need; in other words the need for relaxation (emotional), self-expression and personal development, prestige (status) and even social interaction may be classified under this concept (Ottevanger, 2007:22). A key factor which contributes to the attainment of the above-mentioned needs (and falls within the context of push factors) and which greatly influences the choice of leisure activities, is children. Families with children are a large and important component of the leisure and recreational industry. When making decisions based on which leisure activities to participate in and/or which leisure destination to visit, children (in families) were key factors in the final decision process (Wu, 2011:3). Leisure activities chosen have to keep children occupied. When the activities are inappropriate and children become bored, the burden is felt by the parents. Factors that influence decisions to spend money on leisure activities include: the cost of the activity, whether the activity (or leisure destination has educational benefits and the perceived value for money of the activity.
Pull factors are directly pertinent to the destination itself and can be classified into tangible (for example the physical property) and intangible components such as service and activity offered by the organisation (Ottevanger, 2007:22-25).

The availability of time is another important component influencing the choice of leisure activity. Work is becoming more demanding (extended working hours and time spend at work during weekends and public holidays is becoming more frequent amongst the active workforce).

The availability of one's own transport or access to readily available transport (i.e. busses and taxis) has become a major contributing factor for individuals wanting to visit remote destinations for leisure purposes more frequently, despite the assumption that people traditionally spend most of their leisure time at home. This offers them access and time flexibility. (Patmore, 1983:35).

2.5 Factors influencing visit to properties and destination leisure areas

According to studies undertaken by Somi *et al.* (2012:39-50), leisure destinations are dependent on repeated visits by customers and/or guests and identified the following as influencing factors:

Perceived image of the destination leisure areas

Leisure destinations largely depend on the (perceived) image which the respective organisation's marketing strategy is based on to attract guests and/or tourists (Di Marino, 2011:3-4). "Image" in the context of business, is what people (guests) think of the respective company or destination with the appearance and location largely contributing to create a favourable or unfavourable impression (Moore *et al*., 2009:245). Initially when someone wants to travel to a destination, the individual will have an organic view based on his/her frame of reference (such as referrals from friends and word-of-mouth) and external factors (recognisable images and previous touring influences) of this destination and/or venue (Croy & Wheeler, 2010:2-5). The person will, as part of the decision making process, search for additional information which in turn leads to the formation of expectations. The difference between the expectations formulated and the actual experience derived, will essentially contribute to the satisfaction or dissatisfaction of the guests (Di Marino, 2011:4-5). This can be termed as functional congruity which is the link between the services and attractions a venue offers and the way expectations and needs of guests have been satisfied (Di Marino, 2011:7).

The attributes of the venue or destination

As listed in The Oxford Dictionary, an "attribute" can be defined as a characteristic of someone or something. Pertaining to leisure and recreational venues, this may include factors such as location and accessibility, services, entertainment and special events offered by the venue and its employees, perceived safety and security of the venue, price (of activities offered) and perceived value for money.

Leisure and recreational activities have become a major force in the economy, with the tourism industry in South Africa reported it to be the second fastest growing sector by 2006 (South Africa, 2012). Engaging or choosing to participate in casino activities encompasses some or each of the theories mentioned in the text and is influenced jointly by internal (push factors) and external variables (pull factors).

Gambling defined as “the act of betting money with the possibility of winning or losing” (Business Dictionary, 2013), is a popular pastime enjoyed by many with its origins going as far back as during the age of cavemen. It is regarded as America’s favourite pastime in terms of revenue generating activities (Vacek, 2011:1). Casino entertainment as a form of gambling (within the South African context) includes the activities of machine gaming (slots) and table gaming (poker and blackjack). Encompassing the theoretical framework denoted in the Flow theory, Nash’s Pyramid theory and the Optimal Arousal theory, engaging in casino activities (regarded as entertainment), requires skill and may satisfy a leisure need.

2.6 The casino industry in South Africa

The economic significant casino industry in South Africa is regarded as one of the world’s most successful and attributed to government dispensation of the mid-1990s (Mabuza, 2011:8). Since inception, members of the Casino Association of South Africa (CASA) have up-to-date invested in excess of R20 billion to infrastructure pertaining to the construction of world class leisure and entertainment facilities (Maphai and Collins, 2012:4). In terms of job creation, the industry has given more than 100,000 employment opportunities, contributed R80 million annually to social development and R4,7 billion (for the 2011/2012 period) to government revenue (Maphai and Collins, 2012:4-5). According to the 2012 CASA survey, Gauteng casinos have 17,189 employees (79% permanent and 21% casual respectively) and account for 33% of the total number of employees within the South African casino industry.

There are 40 casino licenses (which allows/authorises the operator to undertake and engage in casino activities and services) available in South Africa of which 37 have been allocated. These licenses are issued by a provincial licensing authority (with the maximum quota determined by the Minister of Trade and Industry). The issuing of licenses is dependent on the operator/managing entity. The process has to be compliant with the National Gambling Act, Financial Intelligence Act and any provincial laws applicable to the province (South Africa, 2004). The casinos in Gauteng are denoted as follows:

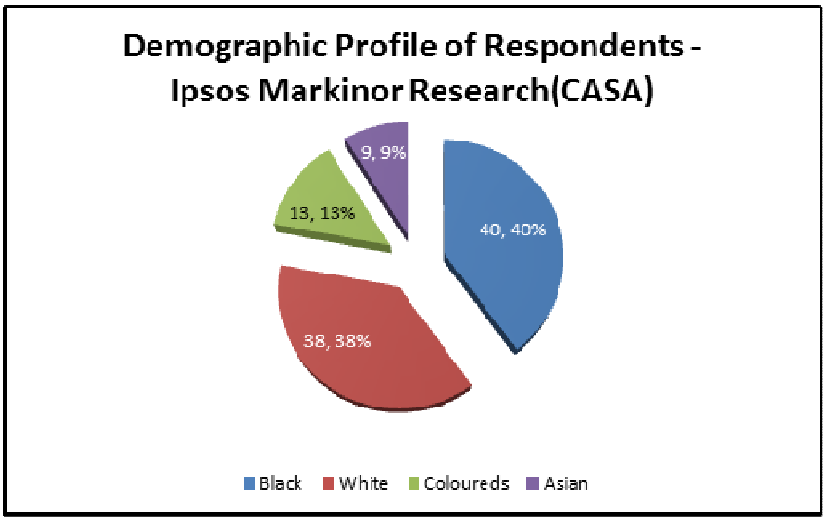
- Carnival City Casino and Entertainment World (Brakpan): Sun International (South Africa) Ltd.

- Emperors Palace Hotel Casino and Convention Resort (Kempton Park): Peermont Global (Pty) Ltd.
- Southern Sun Gold Reef City) Tsogo Sun
- Southern Sun Montecasino (Fourways): Tsogo Sun
- Morula Casino and Hotel (Karenpark): Sun International (South Africa) Ltd.
- Silverstar Casino (Muldersdrift): Tsogo Sun
- Emerald Resort and Casino (Vanderbijlpark): London Clubs International

Revenue generated by the Gauteng-based casinos for the past five years (2008 to 2012) has remained consistent at R6 billion per annum and relatively unscathed by the economic recession. Interestingly South Africa was one out of nine regions (worldwide) that did not report a decline in casino gaming revenues before, during and after the recession (Palenik, 2011). This was iterated in the 2011/2012 Department of Trade and Industry report which denotes that for this period revenues have increased by 5%. Despite of this increase, future growth is forecasted to be limited and primarily attributed to the National Gambling Act‘s restriction of 40 licenses of which 37 have already been allocated (Palenik, 2012).

Engaging in casino activities remains a very popular form of entertainment and is more prominent amongst the employed and affluent. The Ipsos Markinor research, commissioned by CASA and undertaken in 2011, denotes the profile of gamblers and gambling behaviour in South Africa as follows:

Figure 2.1. Demographic profile of respondents of the 2011 Ipsos Markinor survey commissioned by CASA



The demographic breakdown of respondents who frequented casinos as reflected in the chart denotes the profile as follows: Black and White people are almost equally represented at 38,88% and 40,4% respectively, with Coloured people and Asians accounting for the difference of respondents.

Only 3% of the respondents surveyed indicated that they were unemployed and looking for a job with 61% employed on a permanent basis and 10% working part-time. The importance of distinguishing between employed and unemployed respondents, is that there can be assumed (for the purpose of this text) that the impact of external factors would be much worse for people who were employed and had the disposable income (and means) to frequently visit casino or leisure destinations as opposed to people who were unemployed and unable to participate in casino and leisure activities.

Out of the 61% that responded in the 2011-survey undertaken by CASA (as indicated by Maphai, 2012:8), 23% stated that they would gamble once a month and 38% stated that they would gamble once a week with intent to spend R600 or less per visit. Especially relevant to this text is that 77% of the respondents indicated that they owned motor vehicles and therefore the location of a leisure facility (and with regard to this text more specifically casinos) in relation to their respective residences, is a major contributing factor. Although the willingness to travel is often influenced by the attraction of the leisure facility (Patmore, 1983:99), in general the further away the location, the more deterrent to travel it becomes (Patmore, 1983:95-96).

2.7 E-Toll

The e-toll project is an electronic tolling system applied to the Gauteng freeways and commissioned by the South African National Road Association (SANRAL). The main aim of this project (according to SANRAL) was to upgrade and alleviate congested highways in Gauteng (scheduled to become operative during February 2012) and cited by the organisation as necessary for economic growth and development. The collection of revenue or toll fees via non-cash toll transactions can take place either through a 'boom-down' collection, or an open road tolling collection, where overhead gantries (with 49 units built to date) are used. The principle of e-toll is based on a vehicle being identified by the vehicle license number (VLN) or by purchasing an e-tag (the cost of which will be credited to the user's account). Payment can either be settled by credit card (tallied daily) or by the user choosing the option of a pre-paid account.

The project was presented to the Minister of Transport in 2005 and attained approval in 2007 by the cabinet. SANRAL as an organisation reports to the Minister of Transport and borrowed over R20 billion to finance the Gauteng Freeway Improvement Project prior to the 2010 Soccer World Cup (Hamilton, 2013) with the apportionment of this amount as follows (Table 2.1: E-toll Capital Cost):

Table 2.1. E-toll capital costs

E-toll Capex cost	
Roads	R 17 884 002 094
Gantries (civil works)	R 393 867 035
Systems	R 1 837 480 096
Midrand	R 229 756 283
Customer centre	R 217 217 399
Total Capex expenditure	R 20 562 322 907
Km of freeway improved	185
Estimated cost per km	R 111 147 691.39

Source: (Duvenage, 2012)

The operating costs to oversee, administrate and manage the e-toll project (including the gantry systems) are estimated at around R1,7 billion per annum, however this could not be confirmed with an up-to-date final schedule of expenses (Duvenage, 2012). The tender to manage the gantry system was awarded to ETC (Electronic Tolling Collection) at R6,5 billion (for a five year period) with the annual cost estimated at around
R1,3 billion (assuming no escalation costs). ETC as an organisation and consortium comprises of TMT Services and Supplies (35% of shares), Kapsch TrafficCom AB in Austria (25%) and Kapsch TrafficCom AB in Sweden (40%). Interestingly the latter entity was linked to the controversial arms deal in 1999 with Saab (Clark, 2012b). When the e-toll project was approved by cabinet, it was predicated on an estimated cost of R200 million for revenue collection processes. The tender awarded to ETC as denoted above, represents a 550% increase (Duvenage, 2012).
With 185 kilometres of freeway currently upgraded (with effectively only one new lane added), the cost of this project is estimated at R111 million per kilometer (Duvenage, 2012). Hence the e-toll project has been subject to fierce opposition.

The project includes resistance from various parties and associations including the DA, Opposition to Urban Tolling Alliance (OUTA), Cosatu, Automobile Association, South African Vehicle Renting and Leasing Association, Quadpara Association of South Africa, South African National Consumer Union and Justice Project SA. The respondents include SANRAL, the Minister of Transport, MEC for the Department of Road and Transport (Gauteng), Minister of Water and Environmental Affairs, Director of General of Water and Environmental Affairs and the National Consumer Union.
The project, despite of claims by SANRA that it will create some 7,000 jobs by 2030 (Rasool, 2011), has been criticised for the high tariffs gazetted in April 2012 and thus having possible long term economic consequences. The imminent increase in costs for transport and logistics as well as the subsequent increase in inflation is contributing to this directly. Out of 3,5 million registered vehicles in Gauteng only 600,000 registrations (17%) for the e-toll project have been recorded (SANRAL). Over a period of 20 years (assuming e-toll and the current fees are implemented) Gauteng motorists would be expected to pay an additional R73 billion (Duvenage, 2012).

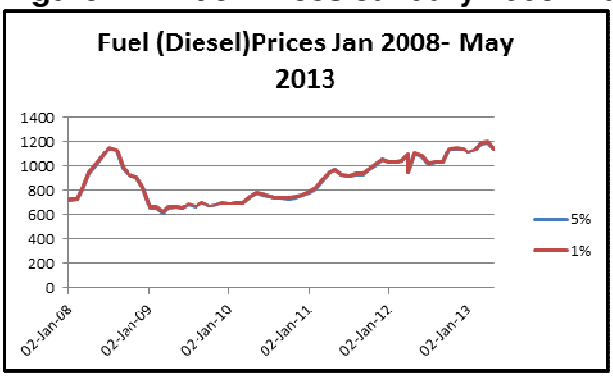
The economic impact of this project has been widely commented on with the consumer expected to absorb the cost: directly by paying the prescribed e-toll fees and indirectly by the increased costs of goods as well as transport and freight (Walsh, 2011:3). In a press release during April 2012 listed on their website, the Consumer Goods Council of South Africa (CGCSA) indicated that for some of their 11,000 member companies, transportation costs account for between 20% and 30% of total expenses. The e-toll project would have a detrimental effect and potential knock on overheads, with small businesses being hit the hardest.
This is further augmented by a continuous rise in oil prices and increase in the fuel levy scheduled to be implemented by mid-2013.

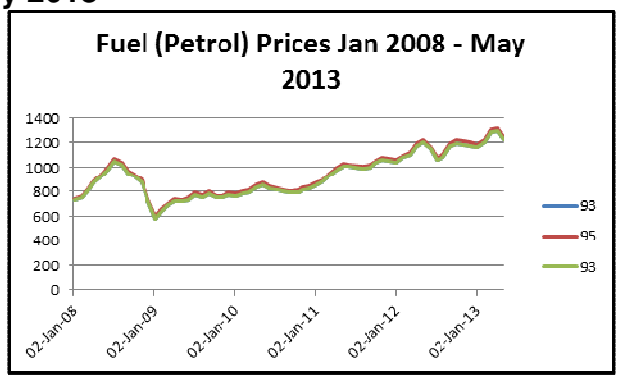
There is a lot speculation and controversy with regards to the e-tolling project and after months of legal battles, implementation seems imminent. This comes despite of the Gauteng High Court presided by Judge Louis Vorster in January 2013 granted OUTA leave to appeal the e-toll project. In February 2013 the Gauteng Premier dismissed Cosatu's request for a referendum (on whether e-tolling should be implemented) to be held and in December 2012 the High Court dismissed OUTA's request to abandon e-toll. The case has subsequently been referred to the Supreme Court of Appeal in Bloemfontein scheduled to take place in September 2013.
The Treasury claims that the longer e-tolling is delayed, the greater chance exists of the South African National Road Agency's credit rating to decrease thus influencing the country's ability to raise government debt (Steyn, 2012). There is a lot of public interest as evidenced in the fact that OUTA was able to raise R8 million making it the highest amount of capital raised for a public funded case (Duvenage, 2012).

2.7.1. Impact of e-toll

Over the last couple of years, after the recessional period (2007 onwards), the way in which people spend their income on leisure and recreational activities, has changed significantly. Rising unemployment rates, increasing utilities (the CPI for this period has increased from 74,8 to 102,9) and fuel costs are factors that will negatively impact any sector (Palenik, 2011). From the time the e-toll project was approved by Cabinet in 2007/2008 to May 2013 the cost of fuel, more specifically petrol and diesel has increased by 67% (42% in the last two years) and 57% (45% since January 2011) respectively (Figure 2.2).

Figure 2.2: Fuel Prices January 2008- May 2013





Source: Automobile Association (Anon., 2013)

The e-toll project categorises five types of users and includes the following (South Africa, 2012a):

- *Registered e-tag user:* someone who purchased an e-tag (registered and accountable for an e-toll account).
- *Unregistered e-tag user:* someone who acquired an e-tag but not registered for an e-toll account).
- *Registered VLN* (Vehicle License Number) user: someone who had not acquired an e-tag but is registered with the agency.
- *Alternate user:* someone who has not complied with any of the e-toll registration requirements.
- *Day pass users:* someone who buys a 24-hour day pass.

According to the Treasury, taxi operators and other public transport services (SAPA, 2012) would be granted an exemption (which is not confirmed pending the publication of the final e-toll tariffs by the Minister of Transport) from paying toll fees thus the revenue (estimated at 95%) to stem from commuters.

2.7.2. Estimated cost of travelling using e-toll freeways

As the text attempts to ascertain the impact on people's decisions to visit casinos, the applicable routes via the Gauteng freeways to the respective venues were identified.

For the purpose of this study it is assumed that most commuters will be using a light motor vehicle or Class A2 vehicle as denoted in the Government Gazette as the preferred mode of transportation (South Africa, 2012a).

When travelling to Gold Reef City from the Vaal Region a commuter is expected to pass one toll point (gantry 17: Ilowe). The cost of traversing the toll point is listed below in Table 2.2 and for the purpose of this study it will be deemed as negligible (Appendix 4).

Table 2.2: Travelling to Gold Reef City

	E-toll plaza #	Standard tariff	Registered e-toll users	Non-registered e-toll users	VLN users	Alternate users
Toll point	17	R 1,16	R 0,60	R 1,16	R 1,16	R 3,48

Source: Government Gazette (South Africa, 2012a)

When travelling from the Vaal Region to *Emperors Palace Hotel Casino and Convention Centre* (Kempton Park) and *Carnival City Casino and Entertainment World* (Brakpan), a commuter is expected to traverse six gantries (toll points: 17 - Ilowe, 29 - Thaha, 31 - Lekgwaba, 22 - Starling, 33 - Gull and 35 - Bee-eater) and five gantries if returning to the point of origin (toll points 34 - Ilanda, 32 - Loerie, 23 - Rooivink, 30 - Lenong and 28 - Phakwe) (Appendix 5). The total cost of travelling, assuming all gantries have been traversed, is listed in Table 2.3.

A return trip from the Vaal Region to the respective properties in Kempton Park and Brakpan depending on the classified user (registered or non-registered), can range from a minimum of R28,14 to a maximum of R163,26 (Figure 2.5).

When travelling from the Vaal Region to *Silverstar Casino* (situated in Muldersdrift) a commuter is expected to traverse four gantries (toll points: 17 - Ilowe, 15 - Fiscal, 13 - Kingfisher and 11 - Owl) and three if returning to the point of origin (toll points: 12 - Pelican, 14 - Ukhozi and 16 - Stork) (Appendix 2).

The estimated return trip to Muldersdrift as denoted above for registered and non-registered users will range between R17,76 and R103,02 respectively (Table 2.4).

When travelling to *Montecasino* in Fourways a traveller is expected to traverse nine gantries (toll points: 17 - Ilowe, 29 - Thaha, 31 - Lekgwaba, 22 - Starling, 20 - Kiewiet, 21 - Kwikkie, 23 - Rooivink, 30 - Lenong and 28 - Phakwe) with a return trip estimated to cost between R41 and R123 for registered and non-registered users respectively (Table 2.5) (Appendix 3).

Table 2.3. ***Estimated e-toll costs for travelling to Emperors Palace Hotel and Convention Centre & Carnival City Casino and Entertainment World***

	E-toll plaza #	Standard tariff	Registered e-toll users	Non-registered e-toll users	VLN users	Alternate users
1	17	R 1,16	R 0,60	R 1,16	R 1,16	R 3.48
2	29	R 6,09	R 3,15	R 6,09	R 6,09	R 18.27
3	31	R 4,70	R 2,43	R 4,70	R 4,70	R 14.10
4	22	R 4,76	R 2,46	R 4,76	R 4,76	R 14.28
5	33	R 6,38	R 3,30	R 6,38	R 6,38	R 19.14
6	35	R 4,70	R 2,43	R 4,70	R 4,70	R 14.10
	One way trip	**R 27,79**	**R 14,37**	**R 27,79**	**R 27,79**	**R 83.37**
7	34	R 4,70	R 2,43	R 4,70	R 4,70	R 14.10
8	32	R 6,38	R 3,30	R 6,38	R 6,38	R 19.14
9	23	R 4,76	R 2,46	R 4,76	R 4,76	R 14.28
10	30	R 6,50	R 3,36	R 6,50	R 6,50	R 19.50
11	28	R 4,29	R 2,22	R 4,29	R 4,29	R 12.87
	Return trip	**R 26.63**	**R 13,77**	**R 26,63**	**R 26,63**	**R 79,89**
	Total cost of trip	**R 54.42**	**R 28,14**	**R 54,42**	**R 54,42**	**R 163,26**

Source: Government Gazette (South Africa, 2012a)

Table 2.4. ***Estimated e-toll costs for travelling to Silverstar Casino***

	E-toll plaza #	Standard tariff	Registered e-toll users	Non-registered e-toll users	VLN users	Alternate users
1	11	R 6,21	R 3,21	R 6,21	R 6,21	R 18.63
2	13	R 5,51	R 2,85	R 5,51	R 5,51	R 16.53
3	15	R 4,87	R 2,52	R 4,87	R 4,87	R 14.61
4	17	R 1,16	R 0,60	R 1,16	R 1,16	R 3.48
	One way trip	**R 17,75**	**R 9,18**	**R 17,75**	**R 17,75**	**R 53.25**
5	12	R 6,21	R 3,21	R 6,21	R 6,21	R 18.63
6	14	R 5,51	R 2,85	R 5,51	R 5,51	R 16.53
7	16	R 4,87	R 2,52	R 4,87	R 4,87	R 14.61
	Return trip	**R 16,59**	**R 8,58**	**R 16,59**	**R 16,59**	**R 49.77**
	Total cost of trip	**R 34.34**	**R 17,76**	**R 34,34**	**R 34,34**	**R 103,02**

Source: Government Gazette (South Africa, 2012a)

Table 2.5. ***Estimated e-toll costs for travelling to Montecasino***

	E-toll plaza #	Standard tariff	Registered e-toll users	Non-registered e-toll users	VLN users	Alternate users
1	17	R 1,16	R 0,60	R 1,16	R 1,16	R 3,48
2	29	R 6,09	R 3,15	R 6,09	R 6,09	R 18,27
3	31	R 4,70	R 2,43	R 4,70	R 4,70	R 14,10
4	22	R 4,76	R 2,46	R 4,76	R 4,76	R 14,28
5	20	R 4,47	R 2,31	R 4,47	R 4,47	R 13,41
	One way trip	**R 21,18**	**R 10,95**	**R 21,18**	**R 21,18**	**R 63,54**
6	21	R 4,47	R 2,31	R 4,47	R 4,47	R 13,41
7	23	R 4,76	R 2,46	R 4,76	R 4,76	R 14,28
8	30	R 6,50	R 3,36	R 6,50	R 6,50	R 19,50
9	28	R 4,29	R 2,22	R 4,29	R 4,29	R 12,87
	Return trip	**R 20,02**	**R 10,35**	**R 20,02**	**R 20,02**	**R 60,06**
	Total cost of trip	**R 41,20**	**R 21,30**	**R 41,20**	**R 41,20**	**R 123,60**

Source: Government Gazette (South Africa, 2012a)

The discounts listed in Table 2.6. are applied as a percentage and are only applicable once a commuter has reached e-toll transactions equating to R400 in a given calendar month. Once a commuter has reached R550 in e-toll transactions he/she will be liable for a 100% discount fee for the rest of the calendar month (South Africa, 2012b). These thresholds are also scheduled to change annually in line with the preceding year's Consumer Price Index.

Table 2.6. ***Cost of trips with applicable discounts***

Emperor's Palace and Carnival City Value of Discount						
Discount (Friday); after 6pm up to and including 11pm.	**10%**	R 5.44	R 2.81	R 5.44	R 5.44	R 16.33
Discount (Saturday and Sundays); after 11am	**15%**	R 8.16	R 4.22	R 8.16	R 8.16	R 24.49
Statutory public holidays (all day)	**25%**	R 13.61	R 7.04	R 13.61	R 13.61	R 40.82
		Cost per trip				
Discount (Friday)	**10%**	R 48.98	R 25.33	R 48.98	R 48.98	R 146.93
Discount (Saturday and Sundays)	**15%**	R 46.26	R 23.92	R 46.26	R 46.26	R 138.77
Statutory public holidays (all day)	**25%**	R 40.82	R 21.11	R 40.82	R 40.82	R 122.45

Silverstar Casino
Value of Discount

Discount (Friday); after 6pm up to and including 11pm.	**10%**	R 3.43	R 1.78	R 3.43	R 3.43	R 10.30
Discount (Saturday and Sundays); after 11am	**15%**	R 5.15	R 2.66	R 5.15	R 5.15	R 15.45
Statutory public holidays (all day)	**25%**	R 8.59	R 4.44	R 8.59	R 8.59	R 25.76

		Cost per trip				
Discount (Friday)	**10%**	R 30.91	R 15.98	R 30.91	R 30.91	R 92.72
Discount (Saturday and Sundays)	**15%**	R 29.19	R 15.10	R 29.19	R 29.19	R 87.57
Statutory public holidays	**25%**	R 25.76	R 13.32	R 25.76	R 25.76	R 77.27

Montecasino
Value of Discount

Discount (Friday); after 6pm up to and including 11pm.	**10%**	R 4.08	R 2.11	R 4.08	R 4.08	R 12.24
Discount (Saturday and Sundays); after 11am	**15%**	R 6.12	R 3.17	R 6.12	R 6.12	R 18.37
Statutory public holidays (all day)	**25%**	R 10.20	R 5.28	R 10.20	R 10.20	R 30.61

		Cost per trip				
Discount (Friday)	**10%**	R 36.73	R 18.99	R 36.73	R 36.73	R 110.20
Discount (Saturday and Sundays)	**15%**	R 34.69	R 17.94	R 34.69	R 34.69	R 104.08
Statutory public holidays (all day)	**25%**	R 30.61	R 15.83	R 30.61	R 30.61	R 91.83

Source: Government Gazette (South Africa, 2012a)

Prior to the tariffs being published in the Government Gazette (13 April 2012) the limit for tagged and non-tagged users was stated to be set at an acceptable R0,30 and R0,58 per kilometre respectively (Clark, 2012). The rates published in the Government Gazette in April 2013 as denoted above for a class A2 vehicle (light motor vehicle) were listed at R3,00 and R5,80 per registered and non-registered e-tag user respectively (900% more than initially stated). In an article on IOL News (13 April 2013) a SANRAL spokesperson stated that traffic on the GFIP-freeways were monitored and assured that it would not cost commuters an extra R200 per month with only 1% having to incur the maximum of R550 per month.

Conclusion

Should e-toll come into effect, the increased cost of travelling to other casinos situated outside the Vaal Region, will be significant. As discussed in the text, the cost impact for the “Alternate user” (anyone who has not complied with any of the e-toll registration processes), would be much more. In some instances costs are projected to exceed R50 up to even R150 per return trip. Chapter 3 will attempt to assess the perceived level of understanding and imminent impact e-toll would have on costs (as denoted above) associated with travelling outside the Vaal Region.

CHAPTER 3
Empirical study

3.1. Introduction

This chapter discusses the research method undertaken in the study in order to ascertain the primary and secondary objectives outlined in Chapter 1. Chapter 2 which focussed on the literature component of the study highlights the types of leisure activities, aspects influencing participation in recreational activities as well as factors influencing the inclination to visit particular leisure destinations. It also discussed the casino industry in Gauteng and quite importantly the e-toll project. With implementation seemingly imminent, Chapter 2 indicated the fees associated with travelling the routes via the freeways to be affected by the e-toll project with the intention of probing the participants if the e-toll project would influence their disposable income.

This chapter (or empirical study) describes what methods were used to undertake the empirical study, which includes the design of the questionnaire, how the sample was chosen, description of the population sample, the measuring instrument used, how it was administered as well as the statistical methods used to analyse the data obtained in order to determine the objectives.

3.2. Research approach

Research is the process of obtaining scientific knowledge through the collecting, analysing and interpretation of information in order to answer a question or problem (Welman *et al.*, 2005:2), explain a phenomenon and acquire new knowledge. Descriptive research is the process of obtaining information (describing) a phenomenon (Bless *et al.*, 2006:43) and the characteristics relative to the issue or phenomenon.

Descriptive research can either be quantitative or qualitative and pertains to describing an occurrence or phenomenon. Explanatory research aims to attain a better understanding of a situation, occurrence or phenomenon (Bless *et al.,* 2006:43-47). Relevant to this study, descriptive research facilitates the reduction of large amounts of data into a smaller and more manageable form (Anon., 2001).

3.2.1. Quantitative study

The quantitative approach (also known as the positive approach) makes the statement that research undertaken, must be free of feelings and opinions (Welman *et al.*, 2005:6-7). Quantitative research

focuses on questions such as “how much”, “how many” and “to what extent” (Hancock, 2002:2) with the aim of producing statistical reliable data. Quantitative research entails the collection and the statistical analysis of the numerical data acquired and relating to the formulated research objectives (Sibanda, 2009:3) with the objective of determining causality between two dimensions or variables. Conversely the qualitative approach (also known as the anti-positivism approach), refers to the study of opinions and experiences pertinent to human behaviour with focus on answering “how”, “why” and “in what way” (Hancock, 2002:2-3).

3.2.2. Research design

The research design pertains to the testing of the theory or hypotheses (Bless *et al*., 2006:71). It can be described as a plan where respondents are identified, from which information is obtained in order to make conclusions about the theory (Welman *et al*., 2005:52-53). It specifies the statistic technique to be used and the sample group to be targeted.

A survey in the form of a close-ended, cross-sectional questionnaire was used in the research study and comprised of leading, importance, Likert-scaled, dichotomous and rating questions. Relevant to this study the advantages of using questionnaires include the following:

- Large amounts of information can easily be collated (Bless *et al.,* 2006:137) and standardised (the collection of data is done in the same way).
- The questionnaire is anonymous.
- The results of the questionnaire can easily be assimilated and quantified, as the collection of data is done in the same way.

3.2.2.1. Questionnaire

The questionnaire (with reference to the Appendix) was developed with the primary objective of determining whether people within the Vaal Region are aware of the costs associated with travelling using the e-toll Gauteng freeways, and whether it will have an impact on their decisions to travel out of their respective residences to other leisure properties. It also probed the respondents for the type of leisure activities they engage in, frequency of visits and the reasons for participating in the respective activities.

The questionnaire developed comprised of four sections:

1. Section one assessed the demographic and economic profile of respondents as well as the frequency of travel to casinos outside the Vaal Region.
2. Section two assessed the factors that attract people to visit and participate in casino activities. It also probes the level of enjoyment derived from casino activities as perceived by the participants.
3. Section three identified the level of information respondents have on e-tolling as well as their level of understanding of the project's possible effects on their disposable income. The section comprises of Likert-scaled and dichotomous ("yes" or "no" questions). The Likert (or summated) scale denotes a collection of responses about a statement, compelling respondents to indicate to what degree they agree or disagree with the particular statement (Welman *et al.,* 2005:156-157).
4. Section four probed the participants for factors that motivate them to engage in leisure activities including the inclination to visit casinos. It also focussed on why the participants engaged in specific leisure activities, what hindered them from participating in certain leisure activities, the estimated amount of money spent per visit and how the participants were informed about leisure activities. This section comprised of leading questions measured by the Likert-scaled method with the aim to attain the secondary objectives as set out in chapter 1.

3.2.2.2. Data collection

With reference to this study, people wanting to visit the various leisure areas were identified as the target market for the sample. Questionnaires were distributed manually to people frequenting various leisure properties with the sample comprising of guests visiting an indoor water park, an outdoor adventure golf course, a tenpin bowling alley, health club as well as hotel and conference delegates, many of whom occupied the various hotels and guest houses situated in the Vaal Region.

An overview of the study and questionnaire was explained to all the respondents including a brief description of the primary and secondary objectives.

Thus it is assumed that all people accessing the leisure areas had an equal chance of being chosen. This process was unbiased.

The advantages of collecting data through this method are that it is relatively less time consuming, less costly and adequately representative of the market that wants to be assessed. Anonymity was guaranteed to all the participants. Questionnaires were completed by the participants at the

respective venues in return for complimentary access and use to the leisure areas offered as an incentive.
A total of eighty five questionnaires were issued, of which sixty one were completed and sent to the Statistical Consultation Services of NWU to capture and analyse.

3.2.3. Validity and reliability

Researchers undertaking quantitative research focus more on reliability than validity to provide data that is consistent and stable (Welman *et al.*, 2005:9). Validity refers to whether the data and findings obtained are representative of the occurrence or phenomenon (Welman *et al.*, 2005:142).

Reliability pertains to the credibility associated with the findings of the research (Welman *et al.*, 2005:145). Thus it can be defined as how the same scores can be attained over multiple trials (Miller, 2002:2). There are numerous aspects associated with reliability in research. The first aspect is internal consistency (homogeneity) which refers to relationships between the results attained in a single survey.

A second aspect is stability which refers to the process where the respondents produce the same or similar scores repeatedly (Miller, 2002:2), using for example test-retest procedures. The third aspect is equivalence or parallel-form reliability. Similar to the test-retest procedure, the second test is changed to measure reactivity of respondents (Bless *et al.*, 2006:152-153). Thus the higher the correlation between the two tests or forms the greater the equivalence and reliability.

Another aspect, split-halves reliability, refers to splitting the tests into halves (for example separating the tests in terms of odd and even numbered questions) and ascertaining the level of correspondence between the two respective halves (Bless *et al.,* 2006:153). This is done by calculating the correlation coefficient for the two respective halves (Welman *et al.,* 2005:147).

3.2.4. Data analysis

Data were captured by the Statistical Services of the NWU at the Potchefstroom campus.

A factor analysis was employed with the internal consistency assessed by the Cronbach Alpha. The aim of exploratory factor analysis includes seeking out clusters of common factors (Suhr, 2003:3) in a data set. This may entail the reduction in the number of variables through the identification of unclear, redundant and irrelevant variables. Exploratory factor analysis (EFA) looks to establish underlying factors between measured variables in a data set (Williams *et al.*, 2012:3-4) as well as attending to multicollinearity (two independent variables that are closely correlated to each other).
Exploratory factor analysis is also essential for examining and identifying the relationships and underlying constructs for a set of measured variables (Tucker & MacCallum, 1997:144-146).

In order to establish the appropriateness of the grouping, Kaiser's measure of sample adequacy (MSA) was determined for the relevant groupings. The measures can, according to Hair *et al.* (1998) be interpreted as follows: $\geq$ 0,80 (meritorious), 0,70 (middling), 0,60 (mediocre), 0,50 (miserable) and $\leq$ 0,50 (unacceptable).

The Cronbach Alpha, which measures the internal consistent reliability, is in essence an indication of test reliability (Mohsen & Dennick, 2011:52). Expressed as a number between 0 and 1, the use of the Cronbach Alpha is regarded as mandatory to ensure accuracy when assessing the data obtained (Mohsen & Dennick, 2011:52).
Cohen's effect sizes (Table 3.1) were used to assess the interpretation of comparison between group means (Hair *et al.*, 1998). Effect sizes are a way to explain or quantify the difference between the means of two groups (Coe, 2002:3) and obtained by dividing the difference between the means of the two groups by the standard deviation (Ellis & Steyn, 2003:2). The effect size is independent of the sample size with the lower p-values denoting greater statistical significance (Ellis & Steyn, 2003:2-3). A p-value, as defined by the statistics dictionary, is the probability that a null-model of a problem statement could be rejected.

The following parameters as denoted in Table 3.1 were referred to when assessing the d-values of the difference between the means:

Table 3.1: Cohen's effect sizes parameters

Where d= I0,2I (absolute value); this indicates a small effect
Where d= I0,5I (absolute value); this indicates a medium effect
Where d ≥ I0,8I (absolute value); this indicates a large effect

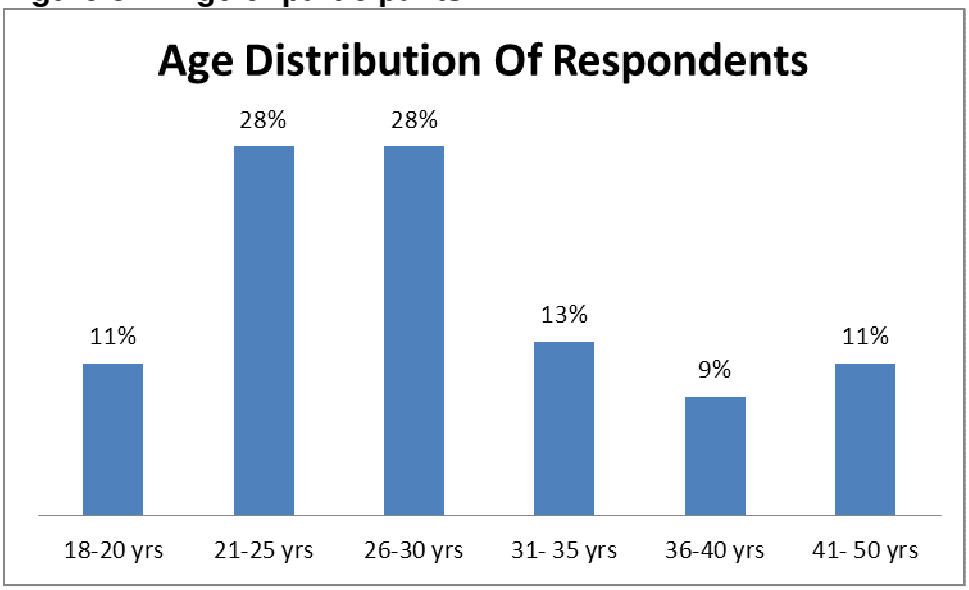
3.3. Empirical results - Descriptive statistics

3.3.1. Section one; demographic profile of participants

Section one assessed the demographic and economic profile of respondents as well as the frequency of travel to casinos outside the Vaal Region. Out of a total of 85 questionnaires issued, 61 questionnaires were returned.

From the response rate of 61 questionnaires (distributed and received), the apportionment of males and females were listed at 34,4% and 65,5% respectively.
The age distribution of the participants with reference to Figure 3.1 can be summarised as follows:

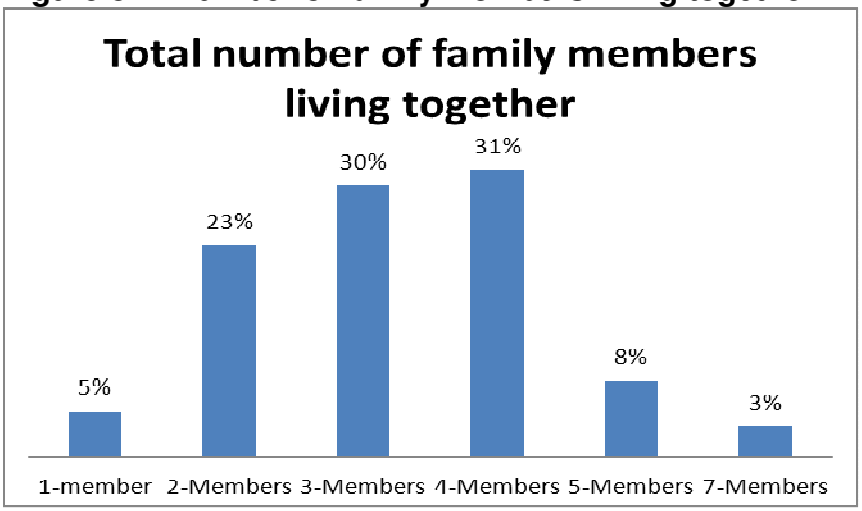
Figure 3.1: Age of participants



56% of the respondents were between the ages of 26 and 35. 11% of the respondents were between the ages of 18 and 25 with 33% representing the remainder of the sample (ages 36 to 50). Only 11% were between the ages of 18 and 20.

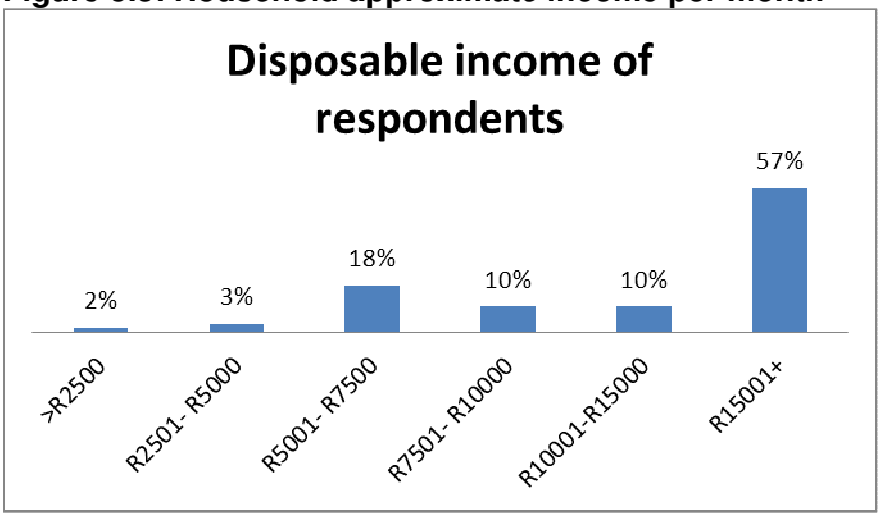
The total number of family members living together ranged from 1 to 7 per household (as denoted in Figure 3.2) with the split between respondents listed either as married (or living together) versus single. The results were recorded at 71,9% and 28% respectively.

Figure 3.1: Number of family members living together



In terms of disposable income and with reference to Figure 3.3, 57% of the respondents indicated disposable income earned as R15,001 and higher. The second largest group which only represents 18% of the sample listed a disposable income earned between R5,001 and R7,500.

Figure 3.3: Household approximate income per month



85,2% of the respondents stated that their place of residence was in the Vaal Region with 96,7% listing that they were employed on a full-time basis. Only two respondents indicated that they were retired. No respondents indicated that they were unemployed.

Figure 3.2: Place of work

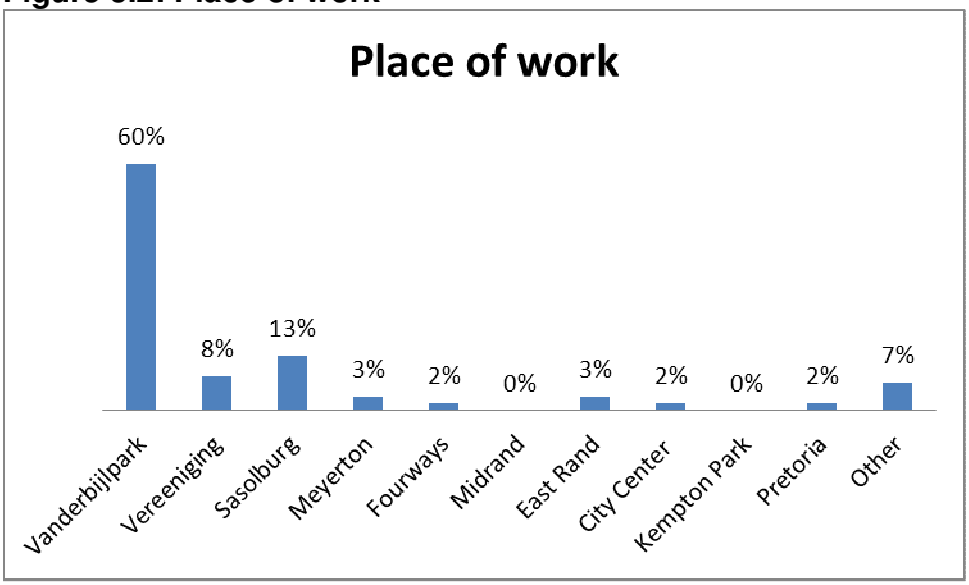
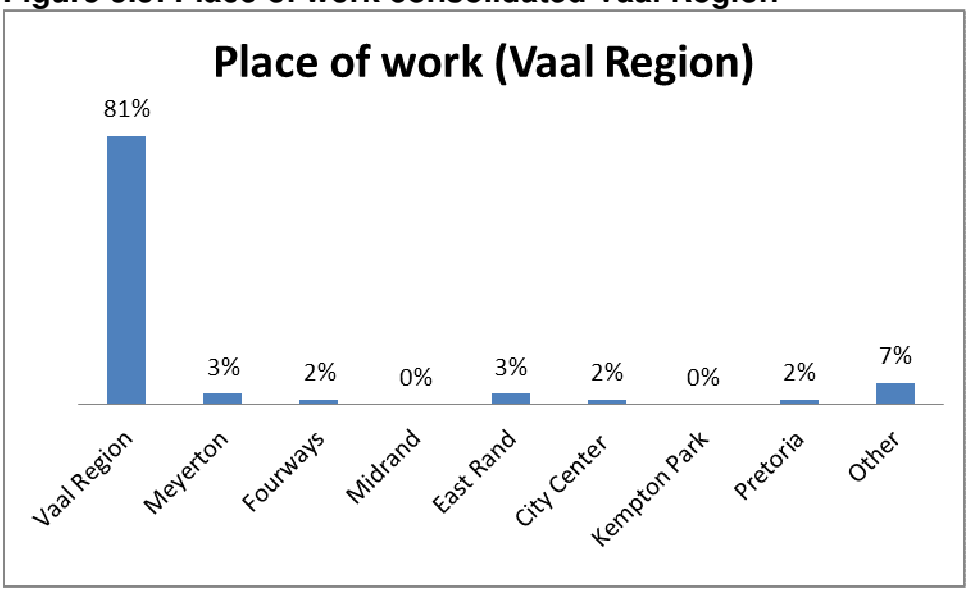


Figure 3.3: Place of work consolidated Vaal Region



The results pertaining to the place of work are denoted in Figure 3.4 with people staying in the Vaal Region (Vanderbijlpark, Vereeniging and Sasolburg) as seen in Figure 3.5, accounting for 81% of the respondents of the sample.

3.3.2. Section two; factors influencing participants to engage in casino activities

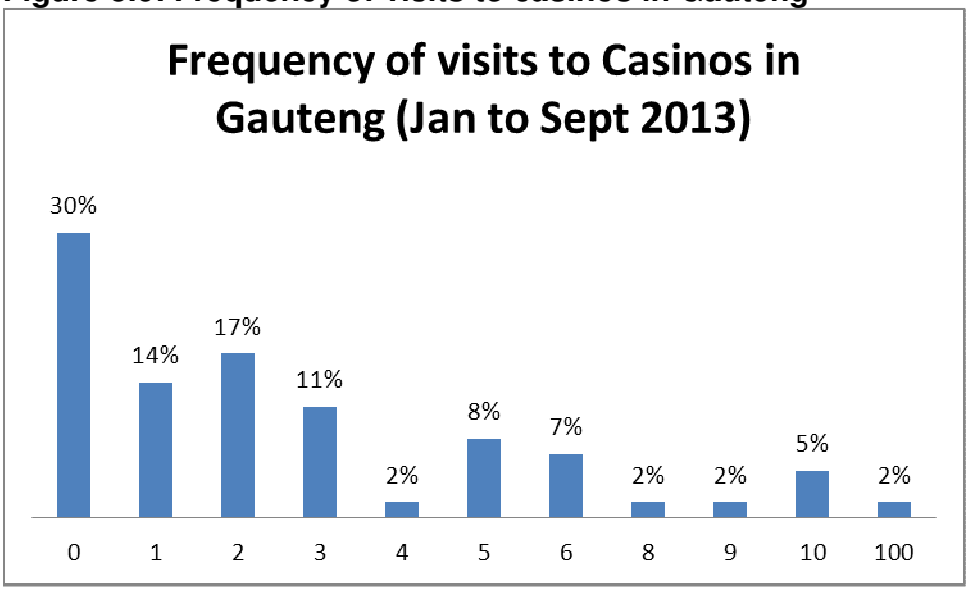
3.3.2.1. Frequency of visits to casinos

Section two of the questionnaire assessed the factors that attract people to visit and participate in casino activities and their respective level of interactivity with casinos and associated activities. It also assessed the level of enjoyment derived from casino activities as perceived by the participants.

With reference to Figure 3.6, 14% of the participants visited casinos once and 17% visited casinos twice during the period January to September 2013 in Gauteng.

30% of the participants indicated that they did not visit casinos in Gauteng.

Figure 3.6: Frequency of visits to casinos in Gauteng



As seen in Figure 3.7, 38% of the participants indicated that they did not visit casinos in the Vaal Region during the period January to September 2013. When comparing the frequency of visits by the participants to casinos in Gauteng and the Vaal Region (and with the exception of the percentage frequency not visiting casinos in the later-mentioned region), the frequency trend of visits remains very similar.

Figure 3.7: Frequency of visits to casinos in the Vaal Region

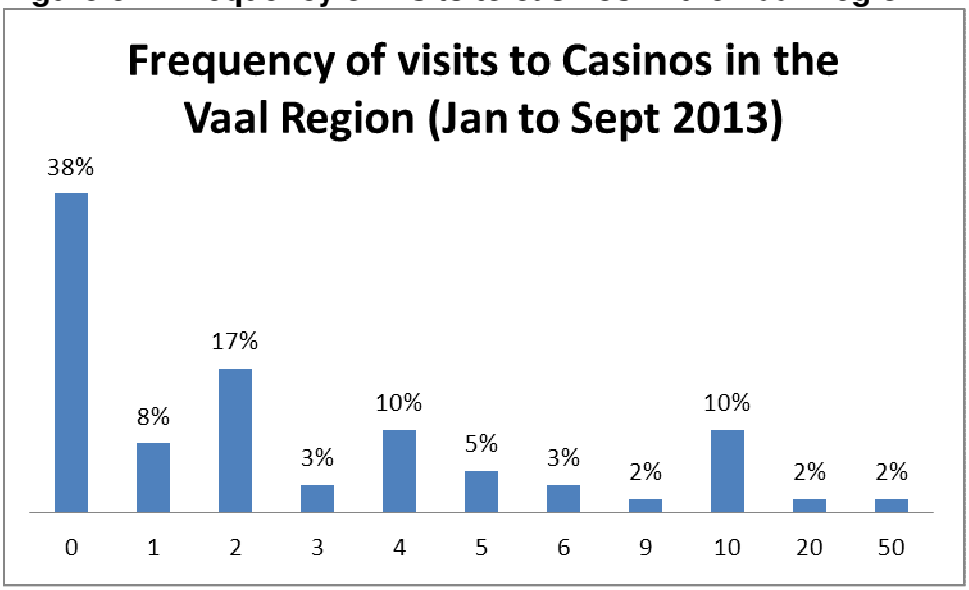
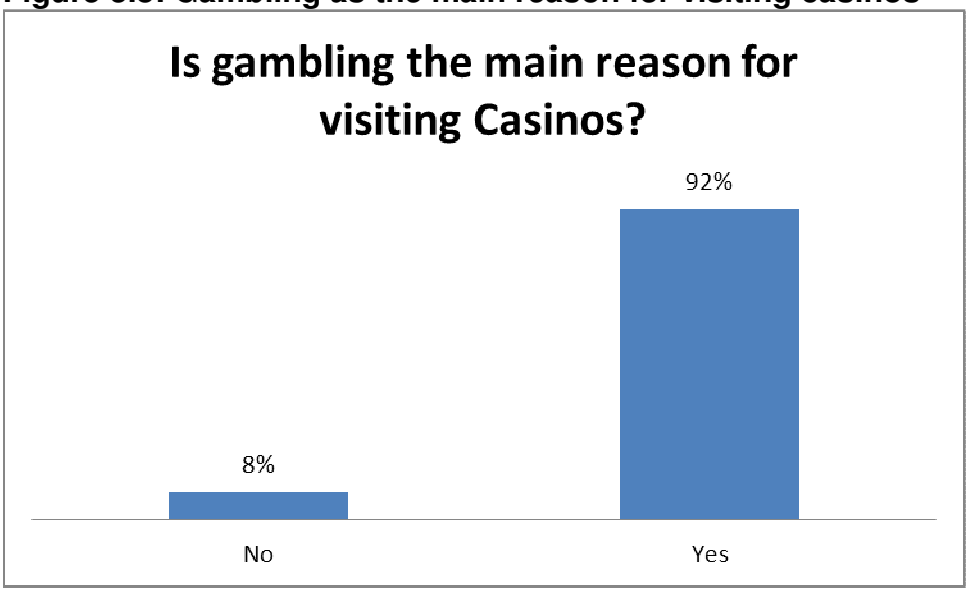


Figure 3.8: Gambling as the main reason for visiting casinos



With reference to Figure 3.8, 92% of the participants listed gambling as their main reason for visiting casinos.

3.3.2.2. Casino attractions

Question 2.4 in the questionnaire distributed and as denoted in Table 3.2 summarises the data which probed participants about what attracted them to a casino. This included the gambling activities (of tables and slots), accommodation and conferencing, food and beverage offerings as well as children's activities.

Question as per questionnaire			Never	Sometimes	Frequently	Almost always
2.4.	1	**Tables games (Poker, Blackjack)**	53%	30%	10%	7%
2.4.	2	**Slots**	55%	30%	10%	5%
2.4.	3	**Accommodation and conference facilities**	25%	43%	24%	8%
2.4.	4	**Food and beverage offering (restaurants)**	5%	29%	41%	25%
2.4.	5	**Children's activities**	26%	28%	23%	23%

Table 3.2 What attracts people to a casino?

The percentage of participants who listed "never" to engaging in the casino activities (2.4.1 and 2.4.2 in Table 3.2) as the reason for visiting a casino is 53% and 55% respectively.

41% and 25% of the respondents listed "frequently" and "almost always" respectively (with "never" listed by only 5%) to the food and beverage offering as an attraction to a casino. This response is regarded as significant and for the purpose of this study can be assumed that the activity is regarded as a major pull factor.

The section which pertained to children's activities as an attraction is almost evenly split across all four sectors (as highlighted in green on Table 3.2).

3.3.2.3. The relationship of people accompanying participants to casinos

This section assessed the relationship of people who accompanied the participants when visiting casinos in Gauteng and the Vaal Region. The results as listed in Table 3.3 with the highest yields highlighted in green and red.

From Table 3.3 the participants are accompanied by their respective spouses (68,85%), friends (62,30%) and children (54,10%).

Table 3.3: Who accompanies people to casinos?

Question		Who are you accompanied by?	Yes	No
2.5.	1	**Spouse**	68,85%	31,15%
2.5.	2	**Relative**	42,62%	57,38%
2.5.	3	**Parents**	34,43%	65,57%
2.5.	4	**Children**	54,10%	45,90%
2.5.	5	**Friend**	62,30%	37,70%
2.5.	6	**Business associates/ colleagues**	39,34%	60,66%

3.3.2.4. Casinos as perceived by the participants

This section probed the level of agreement with the statements relating to casinos as a leisure destination.

Table 3.4: What people think of casinos?

Question as per questionnaire			Strongly disagree	Disagree	Agree	Strongly agree
2.6	**1**	**Casinos are exciting**	11,48%	19,67%	52,46%	16,39%
2.6	**2**	**Casinos are attractive**	6,56%	18,03%	57,38%	18,03%
2.6	**3**	**Casinos are my favourite leisure destination**	25,00%	50,00%	16,67%	8,33%
2.6	**4**	**Casinos are enjoyable**	13,11%	22,95%	54,10%	9,84%
2.6	**5**	**Casinos satisfy my leisure needs**	14,75%	36,07%	37,70%	11,48%
2.6	**6**	**I have enough resources (money) to participate in casino activities**	31,15%	19,67%	42,62%	6,56%
2.6	**7**	**The availability of children's activities influence my decision to visit casino properties in Gauteng**	18,03%	22,95%	29,51%	29,51%
2.6	**8**	**I take in consideration children's activities when making a decision to visit a leisure destination.**	14,75%	19,77%	21,22%	44,26%
2.6	**9**	**The availability of accommodation influences my decision to visit casino properties in Gauteng.**	16,39%	29,51%	45,90%	8,20%

As denoted in Table 3.4, 52,46% and 57,38% of the participants agree that casinos are exciting and attractive respectively; however 50% of the sample group disagreed with the statement of casinos being their favourite leisure destination. 54,1% of the participants stated that casinos were enjoyable.

42,62% of the participants (2.6.6 on Table 3.4.) agreed to have the resources (money) to participate in casino activities whilst 31,15% strongly disagreed to having the money to participate in casino activities.

44,26% of the participants listed as strongly agreeing with the statement of taking children's activities in consideration when making a decision to visit a leisure destination. This is consistent with the findings in section 2 (Table 3.2) of this chapter which states that 23% of the participants listed "frequently" and "almost always" equally (cumulatively equating to 46%) that children's activities attracted the participants to a casino.

45,9% (2.6.9 in Table 3.4) of the participants stated that the availability of accommodation influenced their decision when visiting casinos. 29,51% disagreed with the statement.

Section 3: E-toll

This section identifies the level of information respondents have of e-tolling as well as their level of understanding on the project's possible effects on their disposable income.

3.3.1. How current were participants with news regarding e-toll

The Likert-scale for this section ranged from not very current (1), not current (2), current (3) and very current (4). The findings denote an almost even split between the participants and their level of information pertaining to the e-toll project.

Table 3.5. How current are you with news regarding e-toll?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.1	18,33%	31,67%	40,00%	10,00%	2,416	0,907

The mean for this section was 2,416 with a standard deviation of 0,907. The mean with regards to central tendency, is the most common form of measurement (Levine *et al.,* 2011:114) whilst the standard deviation measures the cluster around the mean (Welman *et al*., 2005:230). The larger the standard deviation the further away the data is spread from the mean, conversely the smaller the standard deviation means that the data is closely spaced to the mean (Levine *et al.,* 2011:120-123).

40% and 10% of the participants were current and very current about news regarding the e-toll project. 50% cumulatively stated that they were not current and not very current (31,67% and 18,33% respectively) about the project.

3.3.2. The cost of petrol and its influence on decisions to travel for leisure

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.6: Does the cost of petrol fees influence your decision to travel for leisure?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.2	4,92%	27,87%	49,18%	18,03%	2,803	0,792

With reference to Table 3.6, only 32% of the participants stated that petrol fees did not have an influence on their decision to travel to participate in leisure activities. 67,21% of the respondents stated (49,18% and 18,03% cumulatively) that the cost of petrol fees would have an impact on their decision to travel for leisure. The mean and standard deviation was calculated at 2,803 and 0,792 respectively.

3.3.3. Cost of travelling and its impact on the participant's decision to travel to other casinos

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.7: If e-toll increased the travelling cost by R10 to R50 per return trip, would that influence your decision to visit other casinos?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.3	3,28%	18,03%	49,18%	29,51%	3,049	0,783

With reference to Table 3.7, the participants who agreed and strongly agreed with the question of whether the e-toll project would influence the decision to visit casinos, was listed at 49,18% and 29,51% respectively. Cumulatively the total number of participants who listed this as an influence is

78,69% and must be regarded as noteworthy. The standard deviation of 0,783 is relatively low and indicates that most of the responses were clustered around the mean (of 3,049).

3.3.4. Cost of travelling and its impact on the participant's decision to travel to other casinos

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.8: If e-toll increased the travelling cost by R50 to R100 per return trip, would that influence your decision to visit other casinos?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.4	1,64%	14,75%	42,62%	40,98%	3,229	0,761

The question, which probed the participants whether an increase in travelling costs of R50 to R100 would influence their decision to travel, had significant results. 42,62% and 40,98% (with a cumulative total of 83,6%) of the participants agree and strongly agree respectively, that the increase in travelling costs would influence their decision. The standard deviation of 0,761 for this question is one of the lowest for this section (three).

3.3.5. Will e-toll add value to our road infrastructure

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.9: Do you think e-toll will add value to our road infrastructure?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.5	39,34%	42,62%	14,75%	3,28%	1,819	0,806

With reference to Table 3.9, 39,34% and 42,62% (cumulatively 81,96%) strongly disagree and disagree (respectively) that the e-toll project will add value to the road infrastructure. 14,75% agreed that e-toll would add value to the road infrastructure.

3.3.6. Will e-toll add value to the South African Economy

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.10: Do you think e-toll will improve the South African economy?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.6	50,82%	40,98%	4,92%	3,28%	1,606	0,736

With reference to Table 3.10, the results pertain to the question of whether the e-toll project will improve the South African economy. The results were quite dominant in that 50,82% and 40,98% of the participants "strongly disagree" and "disagree" respectively that the e-toll project will improve the economy. The standard deviation for this question is calculated at 0,736.

3.3.7. Is e-toll a waste of state funds

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.11: Do you think e-toll is a waste of state funds?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.7	4,92%	4,92%	44,26%	45,96%	3,311	0,786

With reference to Table 3.11, the mean and standard deviation for the question that surveyed participants if they thought the e-toll project was regarded as a waste of state funds, were calculated at 3,311 and 0,786 respectively. 45,96% of the participants responded as "strongly agreeing".

3.3.8. Will e-toll influence the availability of disposable income

The Likert-scale for this section ranged from strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Table 3.12: Do you think e-toll will influence the amount of disposable income available for leisure at the end of the month?

Likert-scale response rate (%)

	1	2	3	4	Mean	σ
Q3.8	3,33%	10,00%	58,33%	28,33%	3,116	0,715

The question that probed participants if the e-toll project would influence the amount of disposable income left at the end of a month available to spend on leisure, resulted in some significant findings. With reference to Table 3.12, 58,33% of the participants "agreed" it would influence their disposable income and 28,33% "strongly agreed". The standard deviation for this question was the lowest which indicates that the responses were clustered closely to the mean of 3,116.

3.3.9. Registering for e-toll

As seen in Figure 3.9, 96,72% of the participants answered to not registering for the e-toll project with 96,67% not planning to register (as seen in Figure 3.10) at all.

Figure 3.9: Have you registered for e-toll?

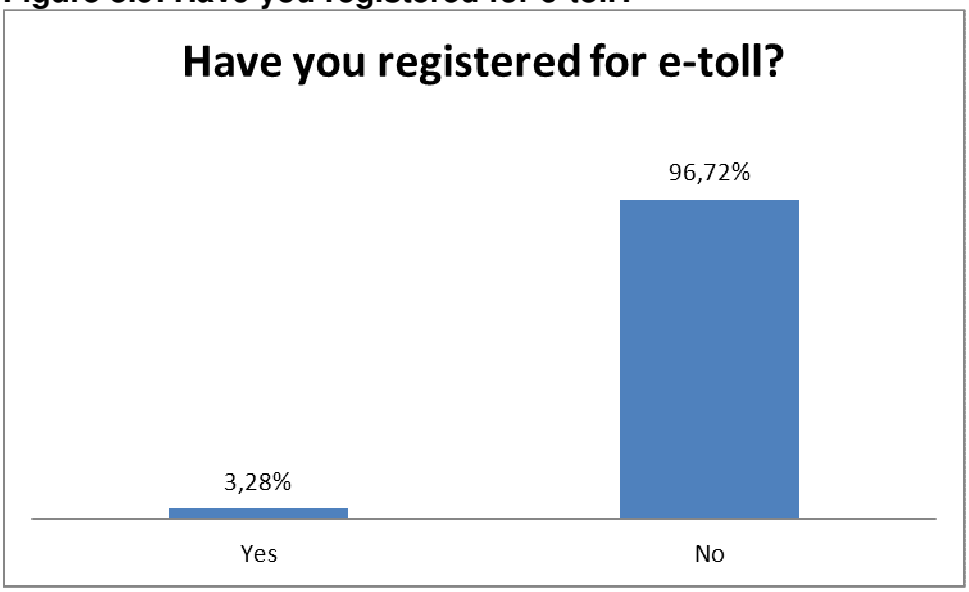
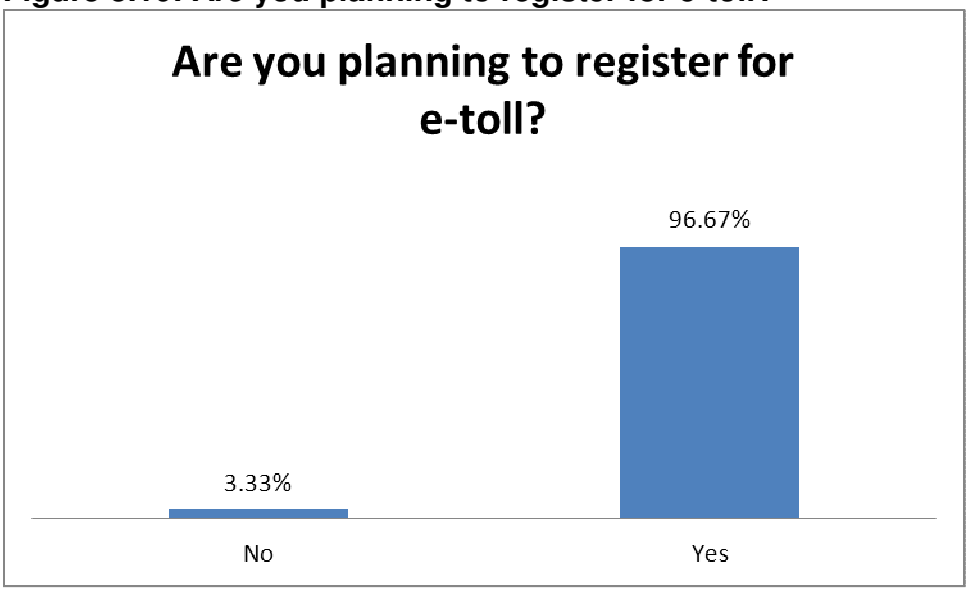


Figure 3.10: Are you planning to register for e-toll?



Section 4: Leisure activities

Section four probed the participants for factors that motivate them to engage in leisure activities including the inclination to visit casinos. It also focussed on why the participants engaged in specific leisure activities, the frequency of visits, what hindered them from participating in certain leisure activities, the estimated amount of money usually spend per visit and how the participants were informed about leisure activities.

Section 4.1. Types of leisure activities

A Likert-scale which ranged from strongly never (1), sometimes (2), frequently (3) and almost always (4) was used to assess the level of participation relative to the stipulated activities. The summary is denoted in Table 3.13.

Table 3.13: Which leisure activities do you participate in?

			Never	Sometimes	Frequently	Almost Always	Mean	σ
4.1	1	Physical activity	24,59%	36,07%	27,87%	11,48%	2,262	0,964
4.1	2	Attending concerts and/ or exhibitions	9,84%	47,54%	31,15%	11,48%	2,442	0,827
4.1	3	Watching live sports	14,75%	36,07%	39,34%	9,84%	2,442	0,866
4.1	4	Social media	9,84%	37,70%	34,43%	18,03%	2,606	0,899
4.1	5	Video games	49,18%	21,31%	22,95%	6,56%	1,868	0,991
4.1	6	Socialising with friends	0,00%	13,11%	49,18%	37,70%	3,245	0,674
4.1	7	Amusement parks	11,48%	47,54%	22,95%	18,03%	2,475	0,923
4.1	8	Reading books or art & culture activities	19,67%	45,90%	24,59%	9,84%	2,245	0,887
4.1	9	Casino activities	36,07%	37,70%	18,03%	8,20%	1,983	0,939

The responses as seen in Table 3.13 were categorised in terms of the highest percentage score attained (from the "frequently" and "almost always" scale) of this section in order to ascertain which activities were deemed as preferred by the participants. This summary is denoted in Table 3.14 and Table 3.15.

From this summary socialising with friends was ranked the highest in terms of the responses. The mean and standard deviation was determined to be 3,245 and 0,674 respectively and is the lowest for this section.

Watching live sports and engaging in social media are the next two most popular forms of leisure activities. Participating in casino activities along with video games were ranked as the least popular in terms of leisure activities listed on the questionnaire.

Table 3.14: Participation in leisure activities

			Frequently
4.1	6.	Socialising with friends	49,18%
4.1	3.	Watching live sports	39,34%
4.1	4.	Social media	34,43%
4.1	2.	Attending concerts and/ or exhibitions	31,15%
4.1	1.	Physical activity (e.g. golf, gym, action cricket)	27,87%
4.1	5.	Video games	22,95%
4.1	7.	Amusement parks (e.g. fun fairs, water parks, zoos)	22,95%
4.1	8.	Reading books or art & culture activities	24,59%
4.1	9.	Casino activities	18,03%

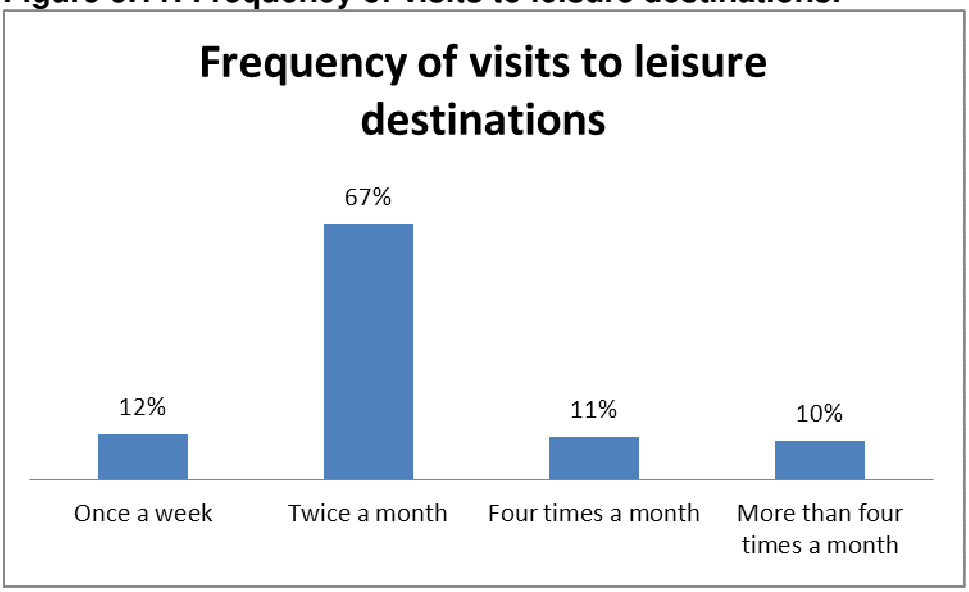
Table 3.15: Participation in leisure activities

			Almost Always
4.1	6.	Socialising with friends	37,70%
4.1	4.	Social media	18,03%
4.1	7.	Amusement parks (e.g. fun fairs, water parks, zoos)	18,03%
4.1	1.	Physical activity (e.g. golf, gym, action cricket)	11,48%
4.1	2.	Attending concerts and/ or exhibitions	11,48%
4.1	3.	Watching live sports	9,84%
4.1	8.	Reading books or art & culture activities	9,84%
4.1	9.	Casino activities	8,20%
4.1	5.	Video games	6,56%

Section 4.2: Frequency of visits to leisure destinations

As denoted in Figure 3.11 the majority of the participants (67%) visit leisure destinations twice a month. 12% visit leisure destinations once a month and 10% visit more than four times a month.

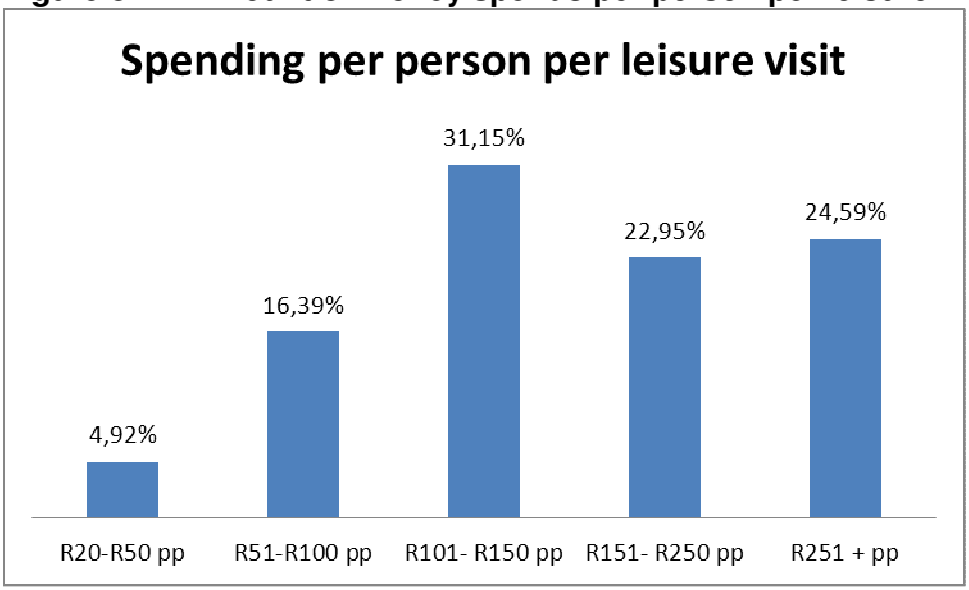
Figure 3.11: Frequency of visits to leisure destinations.



Section 4.3: Money spent on leisure visit per person

Figure 3.12 summarises the information pertinent to the amount of money usually spend by the participants per leisure visit.

Figure 3.12: Amount of money spends per person per leisure visit.



31,15% of the participants indicated spending R101 to R150pp per visit. 47,54% (22,95% and 24,59% cumulatively) indicated spending R151 to R251 plus per visit with only 4,92% of the participants spending R20 to R50pp per visit.

Section 4.4: Money spent of food and beverage offerings

When probed about the amount of money spend on food and beverage whilst visiting leisure destinations, the majority of the participants, 40,98%, as seen on Figure 3.13 indicated spending R151 to R250 per person per visit. 26,23% indicated spending R101 to R150pp per visit with 19,67% spending R251 plus per person per visit.

Figure 3.13: How much do you spend on food and beverage when visiting a leisure destination.

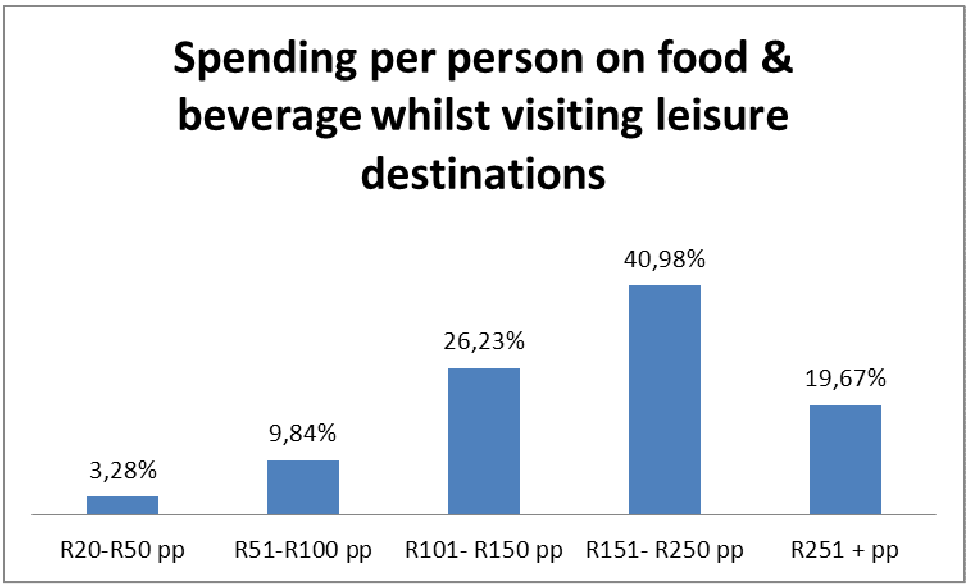


Figure 3.14: Expenditure compared

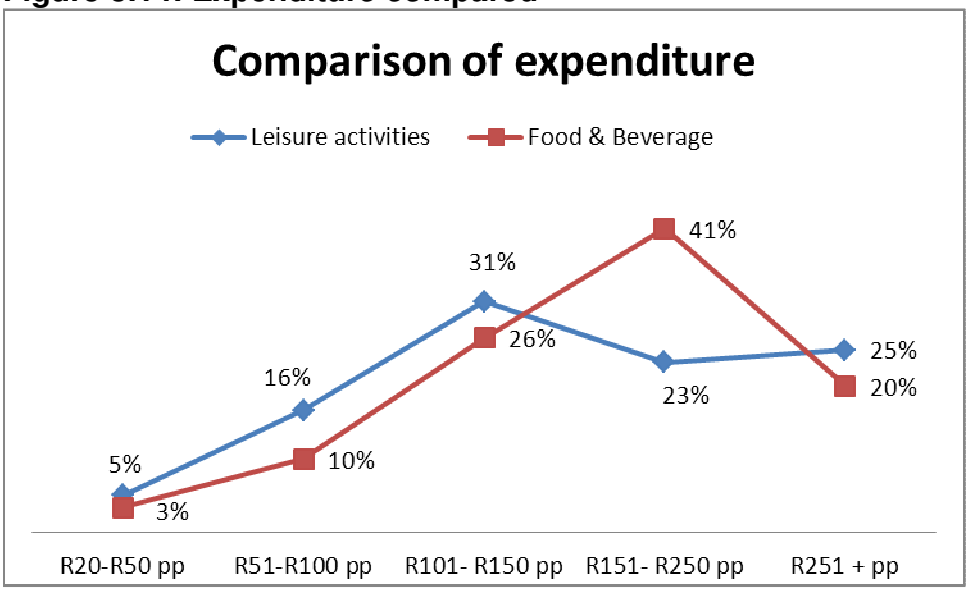
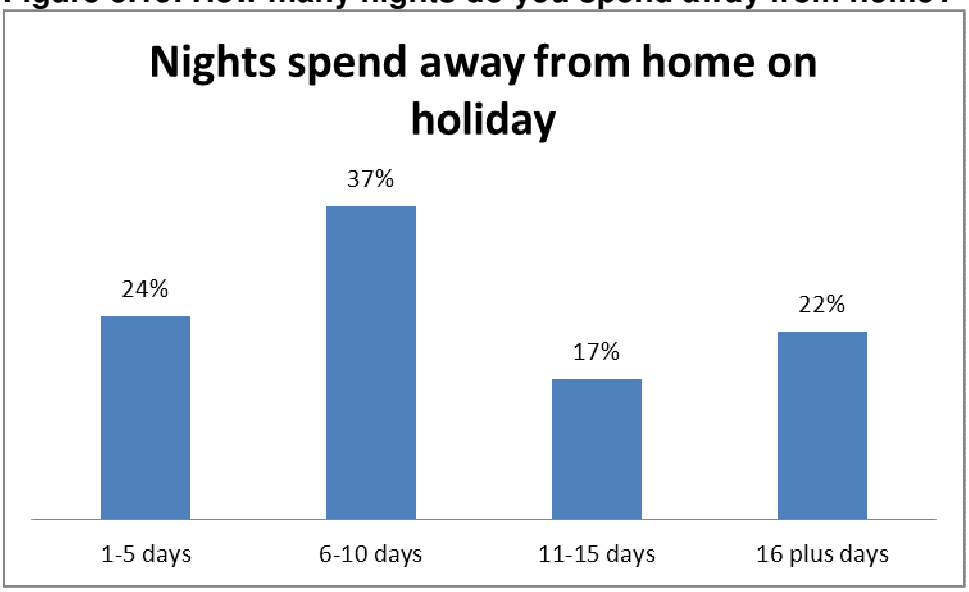


Figure 3.14 compares the expenditure (derived from Figure 3.12 and Figure 3.13) of the participants on leisure activities and food & beverage respectively. The results yielded almost the same trend with one exception; 41% of the participants show to spend significantly more (R151 to R250) per person on food and beverage than on leisure activities. This is consistent with the results attained and summarised in Table 3.2 which reflects that 41% of the participants were frequently attracted to food and beverage offerings at a casino.

Section 4.5: Nights spent away from home while on holiday

This section probed the participants on the amount of nights spend away from home whilst on holiday.

Figure 3.15: How many nights do you spend away from home?



As seen in Figure 3.15, 24% of the participants spend one to five days away from home whilst on holiday. 37% of participants which make up the majority in this section, spend six to ten nights away from home. Only 17% spend 11 to 15 nights away whilst 22% of the participants stated that they spend 16 nights and more away from home.

Section 4.6: Reasons for participating in leisure activities

Table 3.16 summarises the data which pertains to why people participate in leisure activities. Relaxation, escapism and physical and mental health yields the highest favourable response rate from the participants whilst competing with other people was denoted as the least favourable response for participating in leisure activities.

Table 3.16: Why do you participate in leisure activities?

			Strongly disagree	Disagree	Agree	Strongly agree
4.6.	1	Physical and mental health	1,67%	23,33%	60,00%	15,00%
4.6.	2	Relaxation	0,00%	1,64%	63,93%	34,43%
4.6.	3	Escapism	10,67%	27,12%	52,54%	10,17%
4.6.	4	To meet other people	19,67%	42,62%	34,43%	3,28%
4.6.	5	To spend quality time with my family	4,92%	14,75%	39,34%	40,98%
4.6.	6	To compete with other people	42,62%	39,34%	13,11%	4,92%
4.6.	7	To keep my children occupied	31,67%	21,67%	35,00%	11,67%

Section 4.7: Factors hindering the participation in leisure activities

Table 3.17 summarises the data which probed the participants about the factors that hindered their participation in leisure activities.

Table 3.17: What factors hinder your participation in leisure activities?

			Strongly disagree	Disagree	Agree	Strongly agree	Mean	σ
4.7.	1	Lack of money	11,48%	31,15%	37,70%	19,67%	2,65	0,928
4.7.	2	Lack of facilities	8,20%	45,90%	40,98%	4,92%	2,42	0,717
4.7.	3	Lack of time	3,28%	18,03%	62,30%	16,39%	2,91	0,69
4.7.	4	Personal age	24,59%	55,74%	16,39%	3,28%	1,98	0,741
4.7.	5	Disability or health restrictions	36,67%	48,33%	11,67%	3,33%	1,81	0,77
4.7.	6	Too far to travel	8,20%	31,15%	49,18%	11,48%	2,63	0,796
4.7.	7	Looking after someone	39,34%	44,26%	14,75%	1,64%	1,78	0,755
4.7.	8	Children are too small	46,67%	23,33%	25,00%	5,00%	1,88	0,958

62,3% of the participants agreed that lack of time was an element that affected their participation in leisure activities. The mean and standard deviation was determined to be 2,91 and 0,69 respectively and is the lowest for this section. 37,70% agreed with money being a factor hindering their participation in leisure activities.

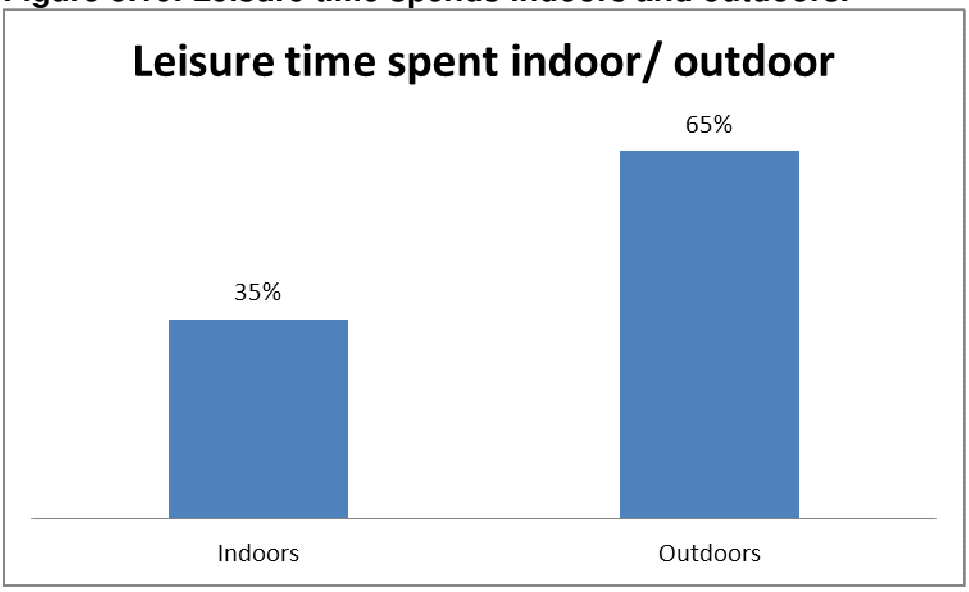
Personal age, health restrictions, lack of facilities and looking after someone were the factors that participants disagreed with the most (as highlighted in red in Table 3.17) as factors influencing their participation in leisure activities.

46,67% of the participants strongly disagreed with listing that children are too small as a factor hindering their participation in leisure activities.

Section 4.8: Leisure time spent indoors and outdoors

65% of the participants as indicated in Figure 3.16 stated spending leisure time outdoors whilst 35% spend time indoors.

Figure 3.16: Leisure time spends indoors and outdoors.



Section 4.9: How do participants find out about what leisure activities to participate in

This section pertained to which mediums were used by the participants to find out which leisure activities to participate in. With reference to Table 3.18, websites, social media (Facebook and other platforms) friends and referrals (or word-of-mouth), are the mediums mainly used by the participants to find out which leisure activities to participate in. 52,46% of the participants indicated using websites frequently and 47,54% and 46,67% listed using social media (Facebook and other mediums respectively) frequently.

51,67% of the participants indicated to only sometimes using newspapers to find out about leisure activities. 43,33% listed to only sometimes using radio whilst 32,79% indicated to using sms's to find out about which leisure activities to participate in.

Table 3.18: How do you find out about what leisure activities to participate in?

			Never	Sometimes	Frequently	Almost Always	Mean	σ
4.9.	1	Newspaper	13,33%	51,67%	28,33%	6,67%	2,28	0,783
4.9.	2	Social media (Facebook)	15,00%	25,00%	46,67%	13,33%	2,58	0,907
4.9.	3	Social media (Other)	11,48%	29,51%	47,54%	11,48%	2,59	0,844
4.9.	4	Radio	13,33%	43,33%	31,67%	11,67%	2,41	0,869
4.9.	5	Websites	6,56%	19,67%	52,46%	21,31%	2,88	0,818
4.9.	6	Sms	32,79%	32,79%	24,59%	9,84%	2,11	0,984
4.9.	7	Friends or referrals	1,64%	18,03%	42,62%	37,70%	3,16	0,778

3.4. Empirical results - Exploratory factor analysis (EFA)

Two exploratory factor analyses were conducted on the results obtained from the questionnaire as a data reduction method. The first exploratory analysis was undertaken on the dimensions pertaining to the types of leisure activities the participants engage in (Question 4.1 of the questionnaire) while the second focused on dimensions which affect why participants can't engage in certain leisure activities (Question 4.7 of the questionnaire).

3.4.1. Factor analysis of leisure activities

The first EFA recorded an overall measure of sample adequacy score (MSA) of 0,647 which, according to the Kaiser Evaluation Threshold (Hair *et al.,* 1998) and with reference to Table 3.19, is considered mediocre. The MSA score provides an indication of the inter correlation between variables (Tabachnick & Fidell, 2001:11).

Three factors were retained by the Mineigen criterion which explained the 60,02% of the variation of the data (in other words 60,02% of the total variance is retained in the three factors extracted from this section). This was calculated by the Statistical Consultancy Services of the NWU.

Table 3.19: Kaiser-Meyer-Olkin (KMO) Evaluation Threshold

KMO Value	Degree of Common Variance
0.90 to 1,00	Marvellous
0,80 to 0,89	Meritorious
0,70 to 0,79	Middling
0,60 to 0,69	Mediocre
0,50 to 0,59	Miserable
0,00 to 0,49	Don't Factor

Factor one which comprised of questions seven, two, nine and six (of section 4.1 of the distributed questionnaire) were classified as *social-based leisure activities*. Factor two comprising of questions three, one and five (of section 4.1 of the distributed questionnaire) were classified as *interactive-based leisure activities*. The last (third) factor comprising of question four and eight (of section 4.1 of the distributed questionnaire) were classified as *sedentary-based leisure activities*.

Field (cited by Ellis & Steyn, 2003:52) indicates that the Cronbach Alpha scores of 0,7 and higher are regarded as adequate.

The listing (labelling) of factors pertinent to the types of leisure activities respondents participate in are seen in the grouping denoted as follows:

Table 3.20: Factor one: social-based leisure activities

4.1	7.	Amusement parks
4.1	2.	Attending concerts and/ or exhibitions
4.1	9.	Casino activities
4.1	6.	Socialising with friends

The Cronbach Alpha for this factor was determined at 0,655.

Table 3.21: Factor two: interactive-based leisure activities

4.1	3.	Watching live sports
4.1	1.	Physical activity
4.1	5.	Video games

The Cronbach Alpha for this factor was determined at 0,724.

Table 3.22: Factor three: sedentary-based leisure activities

4.1	4.	Social media
4.1	8.	Reading books or art & culture activities

The Cronbach Alpha for this factor was determined at 0,342. As this was deemed as inadequate, the individual grouping was thus assessed independently. 4.1.4 and 4.1.8 (as referred to above) was calculated at 0,206 each.

The second EFA recorded an overall MSA score of 0,566 with three factors retained by the Mineigen criterion explaining the 68,069% of the variation in the data.

3.4.2. Factor analysis of factors hindering the participation in leisure activities

The second exploratory analysis pertained to factors that hinder participants to engage in leisure activities. The grouping is denoted as follows:

Table 3.23: Factor one: Physical restraints

4.8.	5	Disability or health restrictions
4.8.	7	Looking after someone
4.8.	4	Personal age

The Cronbach Alpha for this factor was determined at 0,730.

Table 3.24: Factor two: Resource restraints

4.8.	1	Lack of money
4.8.	8	Children are too small
4.8.	2	Lack of facilities

The Cronbach Alpha for this factor was determined at 0,533.

Table 3.25: Factor three: Time and distance restraints

4.8.	3	Lack of time
4.8.	6	Too far to travel

The Cronbach Alpha for this factor was determined at 0,626.

3.5. Empirical results - effect sizes

The assessment entailed analysing the category of age and the impact or relationship on the leisure activities the participants chose to engage in.

The questionnaire listed seven possible entries for the indication of age by the participants. For the purpose of examining the effect size, the age category was classified into two sections i.e. ages of the participants 18 to 35 (group one) and of ages 36 to 51 plus (group two).

Pertinent to the leisure component there were nine activities originally listed in the questionnaire. Further to the data reduction employed, this section was classified into three factor groups and is denoted as follows: *Social-based leisure activities, Interactive-based leisure activities* and *Sedentary-based leisure activities.*

The results obtained (as presented in tabular form below) when assessing the relationship between the two age groups and the three listed groups of leisure activities, are discussed below.

Table 3.26: Effect sizes for age groups and participation in leisure activities

	Group	N	Mean	Σ	p- Value	d-Value
Social-based leisure activities	1	41	2,610	0,531	0,22	0,32
	2	20	2,388	0,700		
Interactive-based leisure activities	1	41	2,358	0,685	0,02*	0,64
	2	20	1,850	0,798		
Sedentary-based leisure activities	1	41	2,707	0,901	0,21	0,34
	2	20	2,400	0,883		
	1	41	2,146	0,910	0,20	0,33
	2	20	2,45	0,8256		

*Statistically significant at 0,05 according to t-test results for independent groups.

There was no statistical significance between social-based (consisting of amusement parks, casino activities, socialising with friends and attending concerts) and the sedentary-based (reading books and engaging in social media) leisure activities when assessing the effect of the two age groups. For the purpose of this study it is assumed that age had no impact on the choice of participation in the two groups of leisure activities (social and sedentary).

As seen on Table 3.26 and with reference to p-value and d-value guidelines, the effect sizes pertaining to interactive-based activities (which includes watching live sports, physical activity and

video games) yielded scores of 0,02 and 0,64 respectively. The p-value of 0,02 is considered as statistically significant as it yielded a score of less than 0,05. The d-score of 0,64 denotes a medium effect (and noticeable to the naked eye) is thus also considered statistically significant.
Thus according to the results yielded, the participants of ages 18 to 35 (group one) engaged more frequently in interactive-based activities than the age group 36 to 51 plus.

Conclusion

The research approach, including the design of the questionnaire, gathering and the collation of data, was discussed in this chapter.
A brief literature overview was also included which provided additional information on the statistical methods, including the factor analysis and Cohen's effect sizes, used in the empirical study.
The following chapter (Chapter 4) will discuss the results from the empirical study with recommendations, including further research that may be employed relevant to the study.

CHAPTER 4

Conclusions and recommendations

4.1. Introduction

This chapter focuses on and discusses the conclusions derived from the literature section and the empirical study. Chapter 1 discusses the demographic profile of the participants, Chapter 2 focuses on the factors influencing the participation in casino activities, Chapter 3 deliberates on the e-toll project and the impact on recreational spending and lastly Chapter 4 discusses the factors influencing the participation in leisure activities.

The chapter also suggest future research that may be undertaken in lieu of the conclusions outlined in this chapter.

4.1. Discussion and conclusions regarding the primary and secondary objectives

4.1.1. Primary objective: E-toll and its impact on recreational spending on people staying in the Vaal Region

The *primary objective* was to ascertain whether implementation of the e-tolling system will influence the spending on recreational activities by people staying in the Vaal Region. Thus the aim was to assess whether an incremental rise in expenses, leading to a decrease in available disposable income will impact people's decisions to travel outside their residences to visit and engage in leisure destinations and activities respectively.

With the implementation of the e-tolling project now imminent, businesses and consumers will feel the belt tighten in the leisure and recreational (and in particular the casino) industry, which is dependent on the availability of disposable income, to be ultimately affected.

The e-toll project will inevitably, from a monetary perspective, affect all road users travelling from the Vaal Region to the greater Johannesburg areas. The questionnaire confirms that the majority of participants (78,69%) agree that an increase in travelling cost by R10 to R50 would influence their decision to travel. Furthermore the majority, specifically 83,6%, of participants agree that an increase in travelling costs of R50 to R100 per return trip would influence their respective decision. This is significant and confirms that the e-toll project will be perceived to have an impact on people's available and disposable income.

The feedback and response from the questionnaire confirms that 81,96% of the participants disagree that the e-toll project will add value to the road infrastructure. In addition to this 91,80% of the participants believe that the e-toll project will not improve the South African economy.
This decision seems to stem from the perception that the e-toll project will add very little value to our (South African) road infrastructure and economy and in lieu of increasing fuel and utility costs.
As derived from the questionnaire the vast majority of people (96,67%) are reluctant and will not be planning to register for the e-toll project.
With the imminent implementation of the e-tolling project as enforced by the signing of the Transport Laws and Related Matters Amendment Bill by President Zuma, businesses will be impacted by the loss of income (particularly the entertainment industry e.g. casino industry), due to the decreased levels of disposable income of consumers.
The e-toll project would undoubtedly have an effect on consumer goods by further diluting the available and disposable income of commuters.

4.1.2. Secondary objectives: Factors influencing the participation in leisure activities

People participate in leisure and recreational activities for various reasons. It may include the need for relaxation, social interaction, and attainment of self-actualisation goals.
The secondary objectives were to:

- Ascertain the participant's preferred choice and the reasons for engaging in particular leisure activities.
- The frequency of visits by the participants to leisure destinations including casinos.
- The amount of income spent on leisure activities per visit.
- How people are informed about the leisure activities they choose to participate in.

The need to engage in leisure activities is central to people's lives with most partaking in some or other form of recreational activity.
From the empirical study the majority of the participants indicated engaging in social activities with 66% of the participants listing visiting leisure destinations twice a month. Push or socio-psychological factors may include aspects or features that satisfy a particular need; in other words the need for relaxation (emotional), self-expression and personal development, prestige (status) and even social interaction may be classified under this concept (Ottevanger, 2007:22).

Consistent with section one which assumed that the participants had the financial resources to participate in leisure activities, Figure 3.12 summarised the amount of money usually spent per leisure visit by each person. 22,95% and 24,59% indicated spending R151 to R251 plus per visit and is, for the purpose of this study, regarded as significant.

Interestingly 40,98% of the participants (as denoted in Figure 3.13) indicated spending R151 to R250 per person, per visit on food and beverage. Thus the willingness to spend on this (food and beverage) iterates the importance of having restaurants and other similar outlets on leisure (including casino) properties. Pull factors are directly pertinent to the destination itself and can be classified into tangible (for example the physical property) and intangible components such as service and activity offered by the organisation (Ottevanger, 2007:22-25). The food and beverage component in relation to this study can be classified as tangible (relating to the physical product) and intangible (satisfying a basic and leisure need).

When someone wants to travel to a particular leisure destination, the individual will have an organic view based on their frame of reference and external factors (such as referrals from friends and word-of-mouth) of the destination and/or venue (recognisable images, previous tourist influences they want to visit (Croy & Wheeler, 2010:2-5). The person will as part of the decision making process search for additional information which in turn leads to the formation of expectations. The difference between the expectations formulated and the actual experience derived will essentially contribute to the satisfaction and/or dissatisfaction of the guests (Di Marino, 2011:4-5).

From this section the following trends with regards to leisure activities can be formulated:

- There are limited facilities in the Gauteng region that can provide the variety of leisure offerings aimed directly at families.
- People staying in the Vaal Region might be inclined to travel less and thus providing an opportunity for leisure operators to take advantage of and encourage repeated visits.
- Outdoor leisure facilities are becoming more popular with families.
- Long weekends are replacing long vacations, which may result in more repeated visits from local customers who want a bigger variety of attractions.
- Guests are price sensitive and want value for money.

- People expect more leisure activities coupled with good service. With increased access to the internet, it has become easier for people to complain if they have a bad experience (compliments and complaints are now communicated faster through social media platforms).

4.1.3. Demographic profile of the participants

Section one of the empirical study summarised the demographic data of the participants involved in the study. 60% of the participants, as seen on Figure 3.1, were above the ages of 26 with 57% of the participants earning a disposable income of R15,001 monthly (all participants stated that they were employed). *For the purpose of this study it was assumed that the participants have the financial resources to participate in recreational activities*. 85,2% of the participants stay in the Vaal Region with 82%, as seen in Figure 3.5, working in the Vaal Region. It can be assumed that commuting by the participants to the Johannesburg areas for work or leisure purposes would occur.

4.1.4. Factors influencing participants to engage in casino activities

The study probed the participants on what factors attracted them to casinos, the frequency of visits and who accompanied the participants to these leisure destinations.

Although the casino activities of tables and slots are the key attraction and the main source of the revenue for such an organisation, the feedback from the participants yielded interesting results. Over 50% (Table 3.2) of the participants stated that tables and slots never attracted them to a casino with only 10% stating that the casino activities frequently attracted them to a casino.

41% of the participants indicated being frequently attracted to a casino because of restaurants and food & beverage outlets. Interestingly participants equally (“frequently” and “almost always”) stated that children’s activities attracted them to a casino. Leisure activities chosen have to keep children occupied. If the activities are inappropriate and children became bored, the burden is felt by the parents. Factors influencing leisure decisions include the cost of the activity, whether the activity or leisure destination has educational benefits and the perceived value for money of the activity.

Thus the availability of food and beverage offerings and children’s activities were indicated as the key attractions (or pull factors) that motivated people to visit casinos.

4.2. Concluding remark

As the casinos in Gauteng are situated relatively within close proximity to each other, it offers guests the freedom of choice. To ensure longevity and sustainability in the industry, casino properties must try to attain a point of difference amongst their respective competitors. In other words casinos must strive to attain a competitive advantage. This may entail, with reference to this study, increasing the variety of food and beverage offerings on offer and/or expand on the availability of children's entertainment on casino properties.

4.3. Further research

Further research may entail to undertake a research to assess the food and beverage preference of guests frequenting casinos and leisure properties. An example of this is a research study on whether at various leisure destinations, a la carte venues are preferred to family-based and fast food outlets. From the findings it was found that children had a definitive role in influencing leisure decisions. Research may be pursued to assess the perception of casino and other leisure areas as a safe and secure environment for children to partake in activities.

Although no research has been done on the possible impact of the e-toll project on the cost of logistics, the Consumer Goods Council of South Africa (CGCSA) indicated in a press release listed on their website in April 2012, that for some of their 11,000 member companies, transportation costs accounted for 20% to 30% of their total expenses. Further research may be undertaken in order to ascertain how much impact the e-toll project will also have on food inflation prices.

With reference to the literature study, the perception of leisure properties in terms of image and attributes could be pursued. This will not only assist the leisure operators to improve on their offerings, but also to aid in the formulation of their respective marketing strategies.

In lieu of the effect size results discussed in the empirical study, the research in accordance with the different theories of leisure (optimal arousal theory, Csikszentmihalyi's flow theory and Nash's pyramid theory) could be pursued to assess the influence of age in the participation of leisure and recreational activities.

REFERENCES

Anon. 2001. Descriptive research methodologies. http://learngen.org/~aust/ EdTecheBooks/AECT_HANDBOOK96/41/41-01.html Date of access: 1 October 2013.

Anon. 2010. Leisure and recreation. http://socialreport.msd.govt.nz/documents/ leisure-recreation-social-report-2010.pdf Date of access: 17 February 2013.

Anon. 2012. E-toll interdict ruling. Press release, 30 April. http://www.cgcsa.co.za/ index.php?limitstart=12 Date of access: 17 February 2013.

Anon. 2013. Gauteng e-tolling: economic impact. http://www.aa.co.za/about/press-room/commentary/gauteng-e-tolling-economic-impact.html Date of access: 20 May 2013.

Anon. 2013. Premier dismisses call for e-toll referendum. SABC News, 25 Feb. http:// www.sabc.co.za/news/a/414646804eaf26eb9561ff7da4cd6ad7/Premier-dismisses-call-for-e-toll-referendum--20130225 Date of access: 26 February 2013.

Archibald, K. 2008. Leisure time and human happiness. http://www.byui.edu/ Documents/instructional_development/Perspective/V8n2PDF/v8n2_Archibald.pdf Date of access: 15 May 2013.

Automobile Association. 2013. Fuel prices update, 25 Feb. 2013. http://www.aa.co. za/on-the-road/calculator-tools/fuel-pricing.html?petrol-year=2013#petrol Date of access: 25 February 2013.

Bless, C., Higson-Smith, C. & Kagee, A. 2006. Fundamentals of social research methods: an African perspective. Cape Town: Juta.

Bless, C., Higson-Smith, C. & Kagee, A. 2011. Fundamentals of social research methods. Claremont: Juta.

Boag, A., Hibbins, R., Harrington, M. & Lloyd, K. 2003. Leisure lifestyles of young people living on the Gold Coast. (Paper delivered by the Gold Coast City Council. Gold Coast. 147 p.)

Business Dictionary. 2013. Gambling. http://www.businessdictionary.com/definition/ gambling.html Date of access: 16 February 2013.

Clark, J. 2012a. How e-toll tariffs work. http://www.moneyweb.co.za/moneyweb-south-africa/how-etoll-tariffs-work?sn=2009+Detail Date of access: 8 February 2012.

Clark, J. 2012b. Who owns what in the e-toll collection company? *Moneyweb*, 3 May. http://www.moneyweb.co.za/moneyweb-south-africa/who-owns-what-in-the-etoll-collection-company Date of access: 20 May 2013.

Coe, R. 2002. What effect size is and why it is important. (Paper presented at the British Educational Research Association Annual Conference.)

Croy, W.G. & Wheeler, F. 2010. Image formation: a research case. http://www. pearson.com.au/wpsBridge/hall_5/Files/Image%20Formation.pdf Date of access: 10 May 2013.

Department of Trade and Industry ***see*** South Africa. Department of Trade and Industry

Di Marino, E. 2011. The strategic dimensions of destination image: an analysis of the French Riviera image from Italian tourist's perceptions. http://www.esade.edu/cedit/ pdfs/papers/pdf10.pdf Date of access: 10 May 2013.

Duvenhage, W. 2012. Why we oppose e-toll. http://www.outa.co.za/site/about-outa/why-we-oppose-e-tolling/ Date of access: 20 May 2013.

Duvenhage, W. 2013. OUTA's e-toll challenge: stronger than ever. *Daily Maverick*, 29 Jan. http://www.dailymaverick.co.za/opinionista/2013-01-29-outas-e-toll-challenge-stronger-than-ever/ Date of access: 1 March 2013.

Ellis, S.M. & Steyn, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values). *Management dynamics*, 12(4):51-53.

Coe, R. 2002. What effect size is and why it is important. Paper presented at the British Educational Research Association annual conference,Exeter, UK. 12 September. http://www.psych.yorku.ca/mcnelles/documents/ESguide.pdf Date of Access: 1 November 2013.

Hair, J.R., Anderson, R.E., Tatham, R.L. & Black, W.C. 1998. Multivariate data analysis. Upper Saddle River, N.J.: Prentice Hall.

Hamilton, S. 2013. E-tolls will not benefit society. *Democratic Socialist Movement*, 1 Mar. http://www.socialistsouthafrica.co.za/index.php?option=com_content&view= article&id=111:e-tolls-will-not-benefit-society&catid=37:izwi-labasebenzi&Itemid=57 Date of access: 20 May 2013.

Hancock, B. 2002. Trent focus for research and development in primary health care: an introduction to qualitative research. http://faculty.cbu.ca/pmacintyre/course_pages/MBA603/MBA603_files/IntroQualitativeResearch.pdf Date of access: 1 October 2013.

Horner, S. & Swarbrook, J. 2005. Leisure marketing: a global perspective. Oxford: Elsevier Butterworth-Heinemann.

Hurd, A.R. & Anderson, D.M. 2010. The park and recreation professional's handbook. Champaign, Ill.: Human Kinetics.

Levine, D., Stephan, D., Krehbiel, T. & Berenson, M. 2011. Statistics for managers. 6th ed. Cape Town: Pearson.

Mabuza, J. 2011. State out to kill goose that lay golden egg. *Sunday Times*, *Business Times:* 8, 17 July 2013.

Maphai, V. & Collins, P. 2012. The 2012 survey of casino entertainment in South Africa. http://www.casasa.org.za/Docs/CASA-Survey-2012.pdf Date of access: 8 February 2013.

Mathai, V. 2011. The 2011 survey of casino entertainment in South Africa. http://www.casasa.org.za/Docs/CASA-Survey-2011.pdf Date of access: 8 February 2013.

Miller, M. 2002. Graduate research methods: reliability and validity. http:// michaeljmillerphd.com/res500_lecturenotes/reliability_and_validity.pdf Date of access: 2 October 2013.

Mohsen, T. & Dennick, R. 2011. Making sense of Cronbach's alpha. *International journal of medical education,* 2:53-55.

Moore, C., Petty, J., Palich, L. & Longenecker, J. 2009. Managing small business: an entrepreneurial emphasis. 14th ed. Sydney: South-Western. 744 p.

Nakamura, J. & Csikszentmihalyi, M. 1998. Concept of flow. http://myweb.stedwards. edu/michaelo/2349/paper1/ConceptOfFlow.pdf Date of access: 28 June 2013.

O'Sullivan, E., Genoe, M.R. & Kennedy, D. 2006. Introduction to recreation and leisure. Champaign, Ill.: Human Kinetics.

Ottevanger, H.J. 2007. Sport tourism: factors of influence on sport eventvisit motivation. Bournemouth: Bournemouth University. (Dissertation - MA.)

Oxford Dictionary. 2013. Attributes. http://oxforddictionaries.com/definition/english/ attribute?q=attributes Date of access: 9 May 2013.

Palenik, M. 2011. PWC's global gaming industry outlook to 2014. http://www. casinoenterprisemanagement.com/articles/january-2011/pwc%E2%80%99s-global-gaming-industry-outlook-2014 Date of access: 15 February 2013.

Palenik, M. 2012. PWC's global gaming industry outlook to 2015. http://www. casinoenterprisemanagement.com/articles/january-2012/pwc%E2%80%99s-global-gaming-outlook-2015 Date of access: 9 May 2013.

Patmore, J.A. 1983. Recreation and resources: leisure patterns and leisure places. New York: Basil Blackwell.

Rasool, F. 2011. Sanral tackles toll free GP. *ITWeb business*, 10 Oct. http://www.nra.co.za/content/E-TOLL_MAP_class_A2_e-tag_Rate~1.pdf Date of access: 17 February 2013.

Rephann, T.J. 1997. Casino gambling as an economic development strategy. *Journal of tourism economics*; 3(2):161-183.

SAPA. 2012. Treasury joins e-toll court battle. *Tech Central*, 23 Apr. http://www.techcentral.co.za/treasury-joins-e-toll-court-battle/31238/ Date of access: 10 May 2013.

SAPA. 2013. E-tolls to cost most motorists R200. *IOL News*, 13 Apr. http://www.iol.co.za/news/south-africa/gauteng/e-tolls-to-cost-most-motorists-r200-1.1499631#. UZ3fc9jy-So Date of access: 20 May 2013.

Sibanda, N. 2009. Quantitative research. http://www.victoria.ac.nz/postgradlife/downloads/quantitative%20seminar18Aug09.pdf Date of access: 1 October 2013.

Somi, A.P.M., Marzuki, A, Yousefii & Abukhalifehi, A. 2012. Factors influencing visitors' revisit behavioral intentions: a case study of Sabah, Malaysia. *International journal of marketing studies,* 4(4):39-50.

South Africa. 2004. National Gambling Act, 2004. *Government gazette*, 26670, (Notice 960.) 12 August.

South Africa. 2012a. Gauteng Freeway Improvement Project, Toll roads: publication of the tariffs for the different categories of road users and classes of motor vehicles, 2012. *Government gazette*, 35263, (Notice 310.) 13 April.

South Africa. 2012b. Gauteng Freeway Improvement Project, Toll roads: publication of the tariffs for the different categories of road users and classes of motor vehicles, 2012. *Government gazette*, 35756, 25 October. (Notice 801.)

South Africa. Department of Sport and Recreation. 1995. Sports and recreation in South Africa: a national policy framework, 1995. Pretoria.

South Africa. Department of Sport and Recreation. 2012. National sport tourism strategy, 2012. Pretoria.

South Africa. Department of Trade and Industry. 2011. Gambling review report. http://www.thedti.gov.za/news2011/Gambling_review.pdf Date of access: 6 February 2013.

South Africa. Department of Trade and Industry. 2012. DTI Annual Report, 2012. Pretoria.

South Africa. Gambling Review Commission. 2010. Review of the South African gambling industry and its regulation. Final report. Pretoria.

South African National Road Agency Limited. 2011. Gauteng Freeway Improvement Project and Open Road Tolling: toll tariffs. http://www.moneyweb. co.za/mw/action/ media/downloadFile?media_fileid=10133 PDF. Date of access: 20 May 2013.

South African National Roads Agency Limited. 2012. Background on e-toll. http:// www.sanral.co.za/etoll/index.php?gort_xml+template~~menu/main~~L1_2065~~ENG. Date of access: 17 May 2013.

Statistics Dictionary. 2013. http://www.statistics.com/index.php?page=glossary&term_id=657 Date of access: 19 May 2013.

Steyn, L. 2012. E-tolling threatens South Africa's credit rating. *Mail & Guardian*, 16 May. http://mg.co.za/article/2012-05-16-e-tolling-threatens-sa-credit-rating Date of access: 20 May 2013.

Suhr, D. 2003. Exploratory or confirmatory factor analysis? http://www2.sas.com/ proceedings/sugi31/200-31.pdf Date of access: 27 August 2013.

Tabachnick, B.G. & Fidell, L.S. 2001. Using Multivariate Statistics. 4th ed. Boston: Allyn & Bacon.

Tavakol, M. & Dennick, R. 2011. Making sense of Cronbach's alpha. *International journal of medical education*, 2:53-55.

Tubbs, B. 2013. Victory for Outa. *ITWeb Business*, 25 Jan. http://www.itweb.co.za/index.php?option=com_content&view=article&id=61315:Victory-for-Outa-in-e-toll-saga&catid=69 Date of access: 17 February 2013.

Tucker, L. & MacCallum, R. 1997. Exploratory factor analysis. http://www.unc.edu/~rcm/book/factor.pdf Date of access: 27 August 2013.

Vacek, H. 2011. The history of gambling. http://www. baylor.edu/content/services/document.php/144593.pdf Date of access: 17 February 2013.

Walsh, K. 2011. Cost of doing business in Gauteng set to rise as e-tolls launched. http://www.deloite.com/assets/Dcom-SouthAfrica/Local%20Assets/Documents/Cost%20of%20doing%20business%20in%20Gauteng%20set%20to%20rise%as20e-Tolls%20launched.pdf Date of access: 18 February 2013.

Webster, G. 2010. Principal components factor analysis; the use of extracted factors in multivariate dependency models. http://www.bama.ua.edu/~jcsenkbeil/gy523/Factor %20Analysis.pdf Date of access: 10 October 2013.

Welman, C., Kruger, F. & Mitchell, B. 2005. Research methodology. Cape Town: Oxford University Press.

Welman, C., Kruger, F. & Mitchell, B. 2010. Research methodology. 3rd ed. Cape Town: Oxford University Press.

Williams, B., Brown, T. & Onsman, A. 2012. Exploratory factor analysis: a five-step guide for novices. *Australasian journal of paramedicine,* 8(3):1-14.

Williams, W.H. 1996. A study of the sustained motivation of individuals with respect to continued, long term participation in leisure activities: the case of rock climbing. Sydney: University of Technology. (Dissertation - MA.)

Wu, K.L. 2011. Family leisure decision making: which museums to visit? Guildford: University of Surrey. (Thesis - PhD.)

Zhou, L. 2005. Destination attributes that attract international tourists to Cape Town. Cape Town: University of the Western Cape. (Dissertation - MCom.)

Appendix

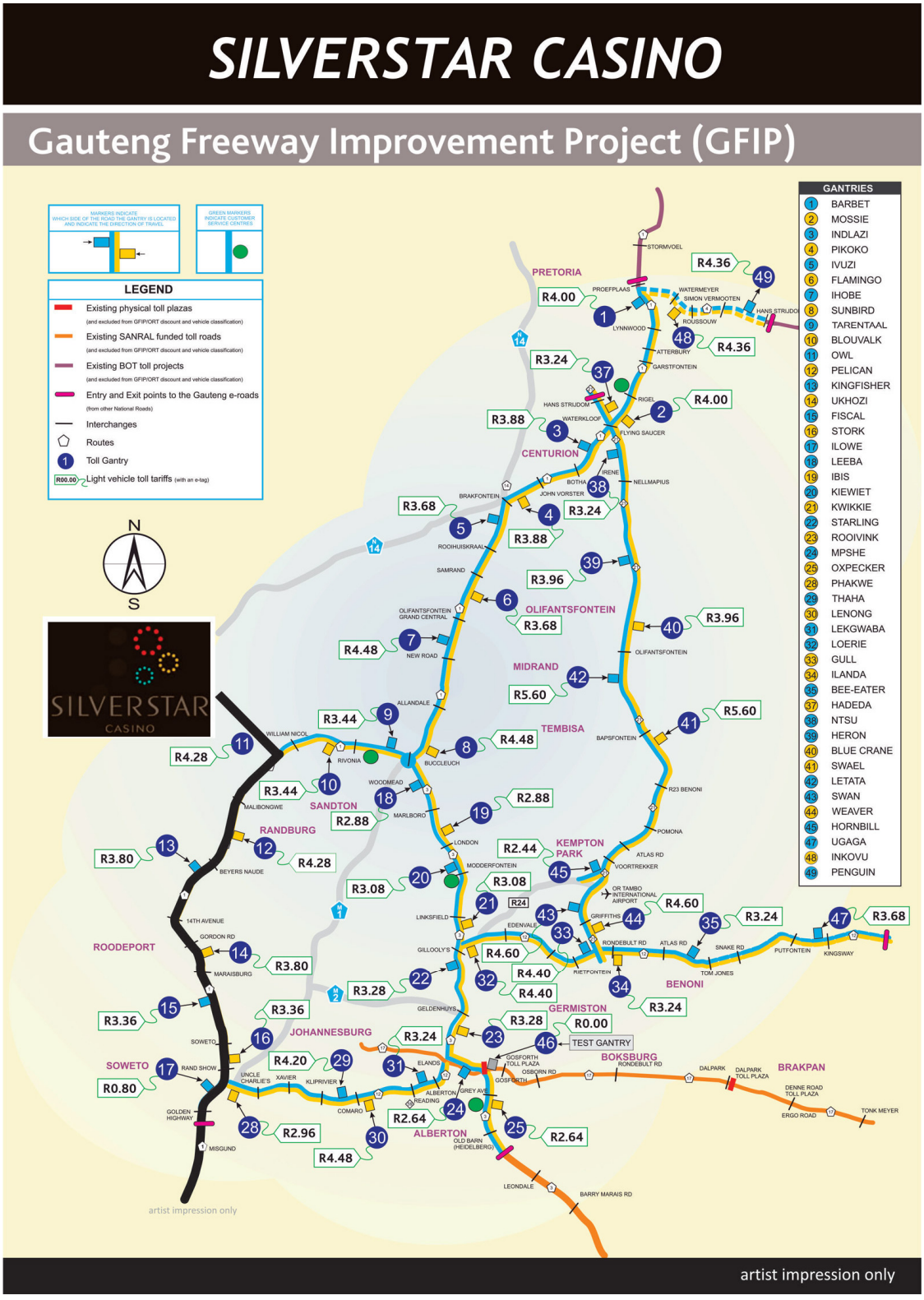
Appendix 1: History of South African gambling

Timeline

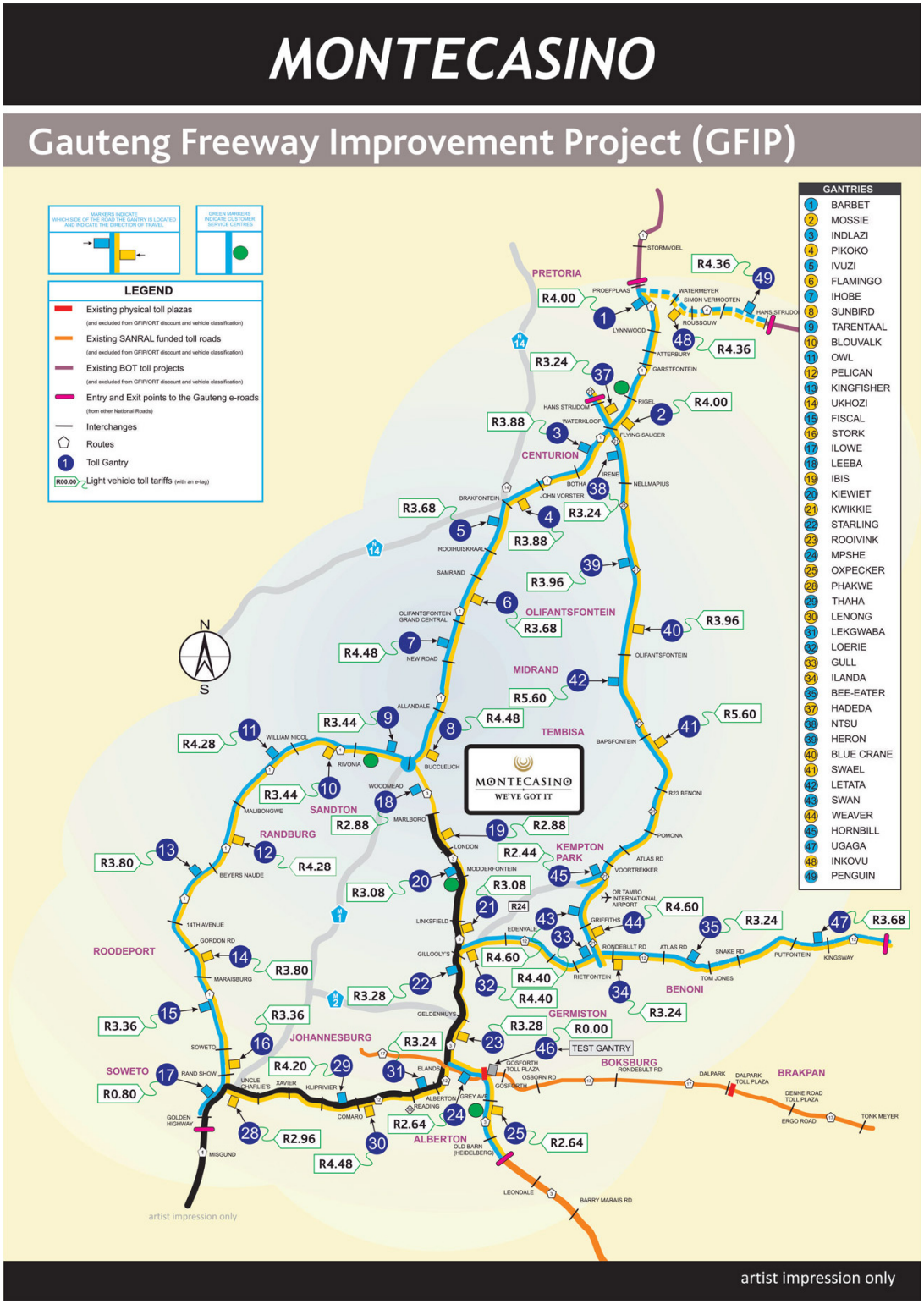
1673 - Betting debarred but limited.
1965 - Gambling Act of 1965 prohibited all forms of gambling with the exception of betting on horse racing.
1970s - Casinos started to operate in Bophuthatswana, Ciskei, Transkei and Venda.
1995 - 2000 casinos (estimated) operated underground.
1994 - Wiehahn Commission appointed to provide Government with recommendations of a national policy framework on gambling.
1996 - Gambling legalised through the inception of the National Gambling Act of 1996 which made provision for 40 casino licenses.
1997 - *Morula Casino and Hotel* opened.
1998 - *Carnival City Casino* (January), *Emperors Palace* (December) and *Gold Reef City Casino* (October) opened.
1999 - *Emerald Resort and Casino* opened.
2000 - *Montecasino* opened.
2002 - First review of gambling policy and regulation undertaken.
2004 - National Gaming Act passed as legislation.
2004-2008 - Five casinos opened in South Africa.
2007 - Recession.
2007 - *Silverstar Casino* opened.
2008 - National Gaming Amendment Act introduced.
2010 - Online gaming banned.

Source: Gambling Review Commission (2010)

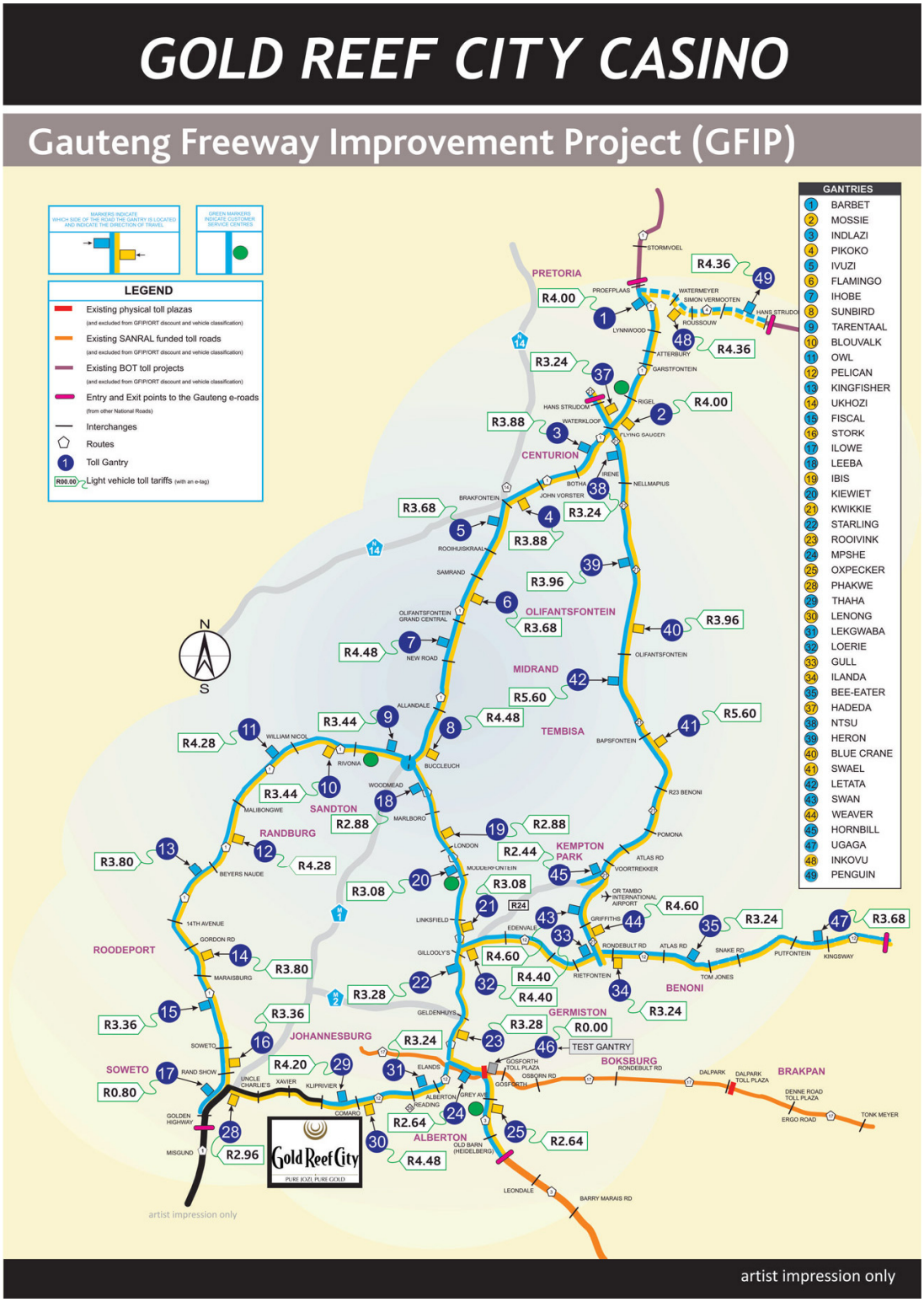
Appendix 2: Proposed route to Silverstar Casino



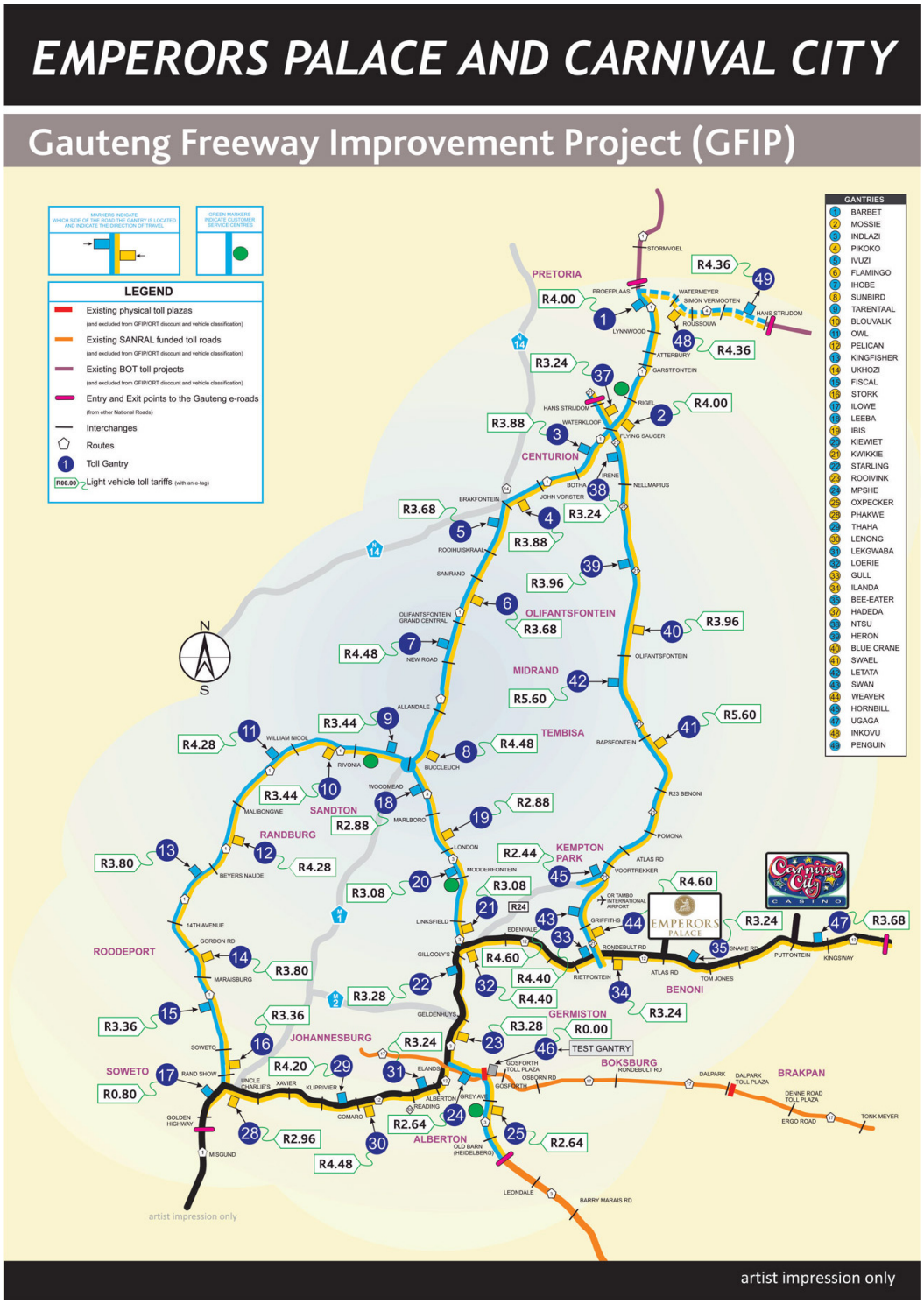
Appendix 3: Proposed route to Montecasino



Appendix 4: Proposed route to Gold Reef City



Appendix 5: Proposed route to Emperors Palace and Carnival City



Appendix 6: Questionnaire

QUESTIONNAIRE

SECTION1:

1.1 Gender

MALE	1	FEMALE	2

1.2 Age

18 - 20	1	21 - 25	2	26 - 30	3	31 - 35	4
36 - 40	5	41 - 50	6	51 +	7		

1.3 Total number of family members (Household) living together _____

1.4 Married / living together or single parent

Married / living together	1	Single Parent	2

1.5 Your household's approximate income per month (Disposable income- what you take home)

Less than R2500	1	R2501 - R5000	2	R5001 - R7500	3
R7501 - R10 000	4	R10 001 - R15 000	5	R 15 001 +	6

1.6 Place of residence

Vaal Region	1	Outside Vaal Region	2

1.7 Are you employed

Yes - full time	1	Yes - Part time	2	No	3
Retired	4	Student	5		

1.8 Place of work

Vanderbijlpark	1	Vereeniging	2	Sasolburg	3
Meyerton	4	Fourways	5	Midrand	6
East Rand	7	City Center	8	Kempton Park	9
Pretoria	10	Other	11		

SECTION 2

2.1 How many times have you visited casinos in Gauteng this year (January to September)? _____

2.2 How many times have you visited the casino in the Vaal region this year (January to September) _____

2.3 Is gambling your main reason for visiting the casinos? Yes 1 No 2

2.4 What attracts you to a casino?

	NEVER	SOMETIMES	FREQUENTLY	ALMOST ALWAYS
1. Tables games (Poker, Blackjack)	1	2	3	4
2. Slots	1	2	3	4
3. Accommodation and conference facilities	1	2	3	4
4. Food and beverage offering (restaurants)	1	2	3	4
5. Children's activities	1	2	3	4

2.5 Who are you accompanied by (Yes or No)

	YES	NO
1. Spouse		
2. Relative		
3. Parents		
4. Children		
5. Friend		
6. Business associates / Colleagues		

2.6 Please rate your level of agreement

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1. *Casinos are exciting*	1	2	3	4
2. *Casinos are attractive*	1	2	3	4
3. *Casinos are my favorite destination*	1	2	3	4
4. *Casinos are enjoyable*	1	2	3	4
5. *Casinos satisfy my leisure needs*	1	2	3	4
6. *I have enough resources (money) to participate in casino activities*	1	2	3	4
7. *The availability of children's activities influence my decision to visit casino properties in Gauteng*	1	2	3	4
8. *I take in consideration children's activities when making a decision to visit a leisure destination.*	1	2	3	4
9. *The availability of accommodation influence my decision to visit casino properties in Gauteng*	1	2	3	4

SECTION 3:

	NOT VERY CURRENT	NOT CURRENT	CURRENT	VERY CURRENT
3.1 How current are you with news regarding the proposed e-toll project	1	2	3	4

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
3.2 Does the cost of petrol fees influence your decision to travel for leisure?	1	2	3	4
3.3 If e-toll increased the traveling cost by R10 to R50 per return trip would that influence	1	2	3	4
3.4 If e-toll increased the traveling cost by R50 to R100 per return trip would that influence your decision to visit other casinos in Gauteng?	1	2	3	4
3.5 Do you think e-toll will add value to our road infrastructure?	1	2	3	4
3.6 Do you think e-toll will improve the South African economy?	1	2	3	4
3.7 Do you think the e-toll project is a waste of state funds?	1	2	3	4
3.8 Do you think e-toll will influence the amount of leisure disposable income available at the end of the month	1	2	3	4

	YES	NO
3.9 Have you registered for e-toll?	1	2
3.10 Are you planning to register for e-toll?	1	2

SECTION 4:

4.1 Which leisure activities do you participate?

	NEVER	SOMETIMES	FREQUENTLY	ALMOST ALWAYS
1. Physical activity (e.g. golf. gym. action cricket)	1	2	3	4
2. Attending concerts and/ or exhibitions	1	2	3	4
3. Watching live sports	1	2	3	4
4. Social media	1	2	3	4
5. Video games	1	2	3	4
6. Socializing with friends	1	2	3	4
7. Amusement parks (e.g. fun fairs, water parks, zoos	1	2	3	4
8. Reading books/ art & culture activities	1	2	3	4
9.Casino activities	1	2	3	4

4.2 How often do you visit leisure destinations?

1	2	3	4
Once a week	Twice a month	Four times a month	More than four times a month

4.3 How much do you spend per person on leisure activities per visit?

1	2	3	4	5
R20 - R 50 per person	R51 - R 100 per person	R101 - R 150 per person	R151 - R 250 per person	R251 plus per person

4.4 On the assumption you can't bring your own food and bevarage to the leisure destination, how much do you spend per person on this per visit?

1	2	3	4	5
R20 - R 50 per person	R51 - R 100 per person	R101 - R 150 per person	R151 - R 250 per person	R251 plus per person

4.5 In the last year how many nights did you spend away from home on holiday?

1	2	3	4
1 -5 days	6 - 10 days	11 -15 days	16 plus days

4.7 Why do you participate in leisure activities?

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1. Physical and mental health	1	2	3	4
2. Relaxation	1	2	3	4
3. Escapism	1	2	3	4
4. To meet other people	1	2	3	4
5. To spend quality time with my family	1	2	3	4
6. To compete with other people	1	2	3	4
7. To keep my children occupied	1	2	3	4

4.8 If you can't participate in leisure activities what are the factors that influence this?

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1. Lack of money	1	2	3	4
2. Lack of facilities	1	2	3	4
3. Lack of time	1	2	3	4
4. Personal age	1	2	3	4
5. Disability / health restrictions	1	2	3	4
6. Too far to travel	1	2	3	4
7. Looking after someone	1	2	3	4
8. Children are too small	1	2	3	4

4.9 Do you spend your leisure time - _____ Indoors _____ Outdoor

4.10 How do you find out about what leisure activities to participate in?

	NEVER	SOMETIMES	FREQUENTLY	ALMOST ALWAYS
1. Newspaper	1	2	3	4
2. Social media (Facebook)	1	2	3	4
3. Social media (other than Facebook)	1	2	3	4
4. Radio	1	2	3	4
5. Websites	1	2	3	4
6. SMS	1	2	3	4
7. Friends / referrals	1	2	3	4