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*Article*

# Visitor Participation in Deviant Leisure Practices in a South African National Park

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**Abstract:** Deviant leisure practices (DLPs) are considered unethical visitor behaviours that threaten the sustainability of tourism resources. Adopting a deviant leisure lens, this study investigates visitor participation in DLPs at the Kruger National Park (KNP) and the causes of those behaviours. Variables related to 15 KNP codes of conduct for visitors were used to measure the DLPs from the visitors' perception of the park. A quantitative survey design, with a sample size of 237 respondents, assessed respondents' participation in DLPs. The study results reveal that some visitors adhere to KNP codes of conduct and do not actively participate in DLPs while others violate them. The most common DLPs by visitors are getting close to animals to take pictures and driving off-road to see animals. The reasons for visitors participating in these behaviours were the need to create memorable experiences and being in "holiday mode". The least violated codes of conduct in the park are picking up archaeological objects to keep them as souvenirs and bringing prohibited items into the park without declaring. This study is significant as it is the first to investigate visitors' participation in DLPs using a self-reported instrument. Based on the results, park managers may develop effective strategies to reduce the number of visitors who get close to animals to take pictures and drive off-road to observe animals at close range.

**Keywords:** codes of conduct; deviant leisure; deviant leisure practices; Kruger National Park; protected area; national park

## 1. Introduction

In an era where tourism is growing at an unrestrained rate (Dias et al., 2023), DLPs are considered widespread behaviours and have been reported to challenge the management of different tourism spaces. Most DLPs are committed 'under the radar' as they violate the codes of conduct in tourism spaces and are difficult to measure. Despite these actions often not being directly visible, the cases of visitors participating in DLPs are prevalent in the tourism industry. In the United States of America, the Association of Hotels and Lodges estimated that theft cost hotels approximately US\$100 million in 2018 (Leasca, 2019). In Italy, a French tourist was reported stealing sand from beaches in Sardinia (Guiffrida, 2019). Another tourist broke three toes of a 19th century statue posing for a photo (Guy, 2020). Based on these cases, it is clear that some visitors disobey codes of conduct engaging in DLPs. While these reports highlight the basic narrative of DLPs in tourism, less empirical evidence exists to validate their frequency and accumulation (Ghazvini et al., 2020). Where there is evidence, it supports one form of DLPs rather than a combination. This view is supported by Au et al.'s (2021) observation that studies assessing diverse DLPs in protected areas in the African context are scarce. This gap underscores the need for further research to investigate a combination of DLPs that violate the code of conduct in protected areas such as the Kruger National Park (KNP).

The KNP is South Africa's largest national park and is amongst the most iconic wildlife sanctuaries in the world (Ballantyne et al., 2023; Van de Merwe, 2023). The park is home to the famous 'Big Five' (Elephant, rhino, leopard, buffalo and lion) and is one of Africa's most decorated game viewing parks (Lubbe et al., 2019). Embedding charismatic landscapes, megafauna and flora, outdoor

activities are popular in the park (Liang et al., 2019). Consequently, the park has become one of sub-Saharan Africa's most sought-after tourism products (Slabbert, 2023; Van der Merwe, 2023). To achieve the dual mandate of conserving sensitive resources and offering high quality visitor experiences, KNP authorities have formulated codes of conduct to mitigate visitor participation in DLPs. Staying in vehicles, not feeding animals, not drinking in public, not removing flora and fauna, not littering and bringing pets into the park are some of the visitor codes of conduct in the KNP (Liang et al., 2019). The codes of conduct are provided to visitors upon their arrival at the port of entry with some displayed along the roads in the park. However, anecdotal information reveals that visitors participate in DLPs in the KNP despite these guidelines. According to Liang et al. (2019), 7% of photographs taken in the park and posted on social media depict unwanted behaviour. Illustrating these reports, the editor of the "Games of Thrones" was killed by a lioness when she opened the car window to take a photograph (Ohlheiser & Izadi, 2015). Recently, while driving, a tourist hit a lion while evading traffic congestion (Moorgas, 2024). Habituation of wildlife to humans has been reported with freshwater terrapins (*Pelusios sinuatus*) in the park (Barrientos et al., 2020). All these cases substantiate that visitors disobey the codes of conduct in the KNP. While DLPs in the KNP have been published in anecdotal information (e.g., newspapers, online travel blogs and public forums), there is a lack of empirical evidence to support their occurrence in the KNP. Utilising a criminological perspective and a deviant leisure theoretical lens, the study objective is to examine the prevalence of DLP by visitors and why visitors fail to comply with the codes of conduct.

## 2. Literature Review

Understanding deviant leisure practices and their causes in protected areas is important for enhancing the development of mitigating systems. This section discusses DLPs, their constituents and causes.

### 2.1. . Understanding Deviant Leisure

Rooted in the discipline of criminology and deviance, deviant leisure refers to any unconventional practice that promotes countless interactive, monetary, ecological and social harms at the intersection of consumer capitalism and forms of commodified leisure (Raymen & Smith, 2020). In its simplest sense, deviant leisure refers to any practice by visitors that does not adhere to the codes of conduct. Littering, hunting, feeding animals, making noise, removing flora and fauna and coming close to animals are some of the common DLPs in a protected area (Chebli et al., 2024; Li et al., 2024; Frenitra et al., 2023; Pratt, 2023; Au et al., 2021; Frey & Briviba, 2021; Sharma, 2020). However, it should be noted that deviant leisure is politically and socially created and hence subjective and variable. An act regarded as deviant leisure in one area might not be deviant in another. To avoid subjectivity and variability in this study, any act that did not comply with KNP codes of conduct was considered deviant leisure.

To clarify and enhance a better understanding of deviant leisure, scholars have approached deviant leisure differently. Positivists suggest that deviant leisure is absolute, objective, observable and predetermined. Contrarily, constructionists suggest that deviant leisure is relative, subjective, and an act of free will (Harris & Magrizos, 2023). Not disputing the positivist and constructivist approaches to deviant leisure, Jorgensen and Reichenberger (2023) believe deviant leisure is better understood if it is placed on a continuum. On the continuum, different forms of deviant leisure exist, ranging from destructive, unsafe, intrusive, and unsustainable. Destructive deviant leisure is considered antisocial and conducted by tourists intentionally causing some damage to tourism property (Bhati & Pearce, 2017). Examples of destructive deviant leisure include vandalism, graffiti, littering, misuse and theft. Unsafe deviant leisure may place tourists at risk. These include cases where tourists interact with animals, adventure hiking, sports activities, and car and transport injuries. Intrusive deviant leisure is disruptive. These behaviours include rowdiness and conflict such as fighting at tourist destinations. Unsustainable deviant leisure involves irresponsible consumption of tourism resources such as the use of water unsparingly in areas with a shortage of water and feeding animals. Pratt (2022), on the other hand, proposed a continuum of deviant leisure looking at

how deviance is committed. Consequently, terminologies such as honest, impulsive (done without forethought) and habitual (done constantly) were proposed.

## 2.2. Constituents of DLPs in Tourism

The term DLPs is yet to be intensively theorised as it is an emerging field of academic discourse. Instead, several alternative labels have been used in tourism literature to refer to practices that do not adhere to codes of conduct. Amongst these are uncivilised behaviour practices (Li & Chen, 2017), misbehaviour practices (Harris & Magrizos, 2021), pro-environmental behaviour practices (Graves & Roelich, 2021), dysfunctional behaviour practices (Chelbi et al., 2023) and jay customer behaviour practices (Pratt, 2022). Despite the diversity and divergence of the labels in different contexts, a common theme among these labels is that they all denote any practices by visitors that completely or slightly differ from usual practices after entering an unfamiliar setting (Li et al., 2022). This study bungles these alternative labels and terms them DLPs to avoid confusion. In this regard, DLP is not a buzzword but a term that is all-encompassing and relatively specific and hence was preferred for this study.

Acts that do not comply with codes of conduct in tourism have been categorised differently by scholars based on the terms used. This study adopted Chebli et al.'s (2024) typologies of jaycustomer behaviour to formulate the constituents of DLPs. Instances of DLPs in protected areas are committed by disengaged visitors who are often rude and harass others. Harassment might be sexual, verbal or physical. Some visitors in protected areas become aggressive to other tourists. In most cases, aggressive visitors are those who use substances such as drugs or abuse alcohol. In part, it might be intentional or unintentional. Intentionally, visitors might behave rudely or aggressively to show their superiority while unintentionally visitors might be unfamiliar with the environment and fail to adapt to the area's social norms (Chebli et al., 2024). Visitors may steal objects from protected areas which is against the codes of conduct (Pratt, 2023). Chebli et al. (2024) observe that visitors undertaking hiking trails at Tassil N'Ajjer Park pick up objects they intend to keep as souvenirs which is not allowed.

Visitors may break the laws knowingly and unknowingly in protected areas. At Tassil N'Ajjer Park in Algeria, Chebli et al. (2024) note that visitors consume cannabis which is against the codes of conduct. Frenitra et al. (2023), Goh et al. (2020) and Goh (2019) note that some visitors walk outside the designated walking trails, get out of their cars or protrude and get close to the animals. Littering is a common DLP by visitors in protected areas. Visitors dispose of non-biodegradable waste such as plastics which pollute the environment and reduce the quality of the visitor experience (Ghazvini et al., 2020). In a study at the Pilanesberg National Park in South Africa, Scholtz and Van der Merwe (2020) found high levels of littering in overcrowded areas. Studying visitor littering behaviour at Yanchep National Park in Australia, Esfaindair et al. (2023) indicated that littering has become a habit among visitors. In Israel, Lev, Negev and Ayalon (2023) studied natural sites and found that 32% of participants generated waste. Visitors are also known to make noise which disturbs other visitors or animals (Li et al., 2021). In Ibiza, visitors are reported to organise wild parties and use amplifiers and loudspeakers, disturbing the tranquillity of the desert (Au et al., 2021).

Vandalism is another DLP common in protected areas. Bhati (2023; 2021) observes that visitors often damage local traditions and culture through vandalism. Vandalism may be graffiti on rock paintings, drawings or defacement of attractions (Chelbi et al., 2021; Wu et al., 2020). According to Frey and Briviba (2021) and Sharma (2020), visitors have been known to destroy cultural relics and historical sites. Table 1 below summarises some DLP studies showing the domain, research focus, and methodologies utilised.

**Table 1.** Summary of Past Deviant Leisure Studies.

Researchers	Domain and location	Research focus	Research Method
Pratt (2020)	Hotels and airlines in Hong Kong	• Tourists stealing items	Quantitative
Chebli, Moussa-Alloui, Kadri and Falardeau. (2024)	Tassili N’Ajjer in Algeria.	• Causes • Typologies • Consequences	Mixed
Goh (2019)	National Park in Australia	• Venturing off-trail	Qualitative
Harris and Magrizos (2023)	UK leisure industry	• Souvenir	Qualitative
Li et al. (2024)	Huangshan Mountain in China.	• Overcrowding	Qualitative
Wu, Lin and Liu (2020)	Xitou Nature Education Area in Taiwan	• Vandalism	Quantitative
Lev et al. (2023)	Israel	• Littering	Quantitative
Esfandiar, Pearce, Dowling and Goh (2023)	Yanchep National Park in Australia	• Littering	Quantitative
Van der Merwe (2020)	Kruger National Park, South Africa	• Overcrowding	Qualitative
Liang, Kirilenko, Stepchenkova and Ma (2019)	Greater Kruger National Park	• Getting close to animals • Getting out of the car • Protruding from the car • Using alcohol • Littering • Engaging in dangerous behaviour	Qualitative

In a study of hotels and airlines in Hong Kong, Pratt (2020) found that tourists steal from hotels and airlines. Shampoos, conditioners, bath gels, tea or coffee, toiletries, free hotel slippers, stationery, towels and bathrobes are commonly stolen from hotels whilst pillows, toiletries, blankets, cutlery, headphones and food are stolen from airlines. Lev et al. (2023) conducted a study at the Xitou Nature Education Area in Taiwan to assess littering and found that littering was common among tourists. In the context of this study, Van der Merwe (2024), Liang et al. (2019) and Ballantyne et al. (2017) conducted studies in the KNP analysing different aspects of DLPs. Ballantyne et al. (2017) looked at the stakeholder perception of traffic congestion [Open Safari vehicle (OSV)] and the results that traffic congestion was a problem. In a follow-up study, Van de Merwe (2024) noted that tourists’ perceptions differ in relation to OSV in the KNP. Liang et al. (2019) conducted a study using social media to establish unwanted behaviour displayed by visitors in the Greater Kruger National Park. The results revealed that 7% of the photographs showed unwanted behaviours. Among these behaviours, the most common DLP was visitors getting out of their cars (79%), followed by protruding from their vehicles (14%) and having close contact with animals (4%). Van der Merwe (2023) conducted another study in the KNP exploring behaviour in overcrowded areas. According to the study results, visitors in overcrowded areas engaged in harmful or disruptive activities such as speeding.

A review of the studies suggests that studies on DLP or compliance with codes of conduct have been conducted in the tourism industry. However, most of these studies isolated the aspects of DLP, treating them as independent. Furthermore, there is less quantified evidence of their magnitude in protected areas such as national parks. Most importantly, no study has been conducted to provide evidence of visitor compliance with codes of conduct to highlight DLPs from a visitor’s point of view.



This indicates that evidence is needed to determine the most common DLPs in the KNP to enhance the development of mitigating strategies.

### 2.3. Causes of DLPs

Human behaviour is complex and driven by a rich tapestry of causes. Chebli et al. (2024) proposed three main mediating factors namely: situational factors, information retrieval and judgement formation, and personal factors. Situational factors include lack of supervision, pricing, weak enforcement of regulation and unavailability of sanctions. Since most protected areas are created for visitors to relax and enjoy, there is weak law enforcement and supervision. However, the laissez-faire approach that characterises the parks has become one main reason visitors violate the law. In a study conducted by Li and Chen (2022), the results revealed that misbehaviour by tourists is determined by the perception that rules and protective recommendations are not enforced.

Information retrieval may cause visitors to engage in DLPs. Information retrieval includes reasons such as lack of communication and information dissemination. According to the theory of moral disengagement, people who lack knowledge are often disengaged (Bandura, 2019). As such, visitors who engage in DLPs justify the behaviour based on not being aware of the consequences (Juvan & Dolnicar, 2021). Dolnicar et al. (2020) emphasised the denial of the consequences of travel, denial of responsibility and denial of control as causes of DLPs. Some visitors engage in DLPs because they are confused by the way information is disseminated. There might be confusion about the codes which are not clear enough to be interpreted by the visitor. Ambiguity is one issue which might result in visitors justifying their irresponsible behaviour practices.

Judgemental formations and personal factors cause visitors to engage in DLP. Judgemental information includes egocentrism, group effect and ethnocentrism. Under egocentrism, visitors pay less attention to a collective good than one's good. In this case, the "tragedy of commons" prevails with tourist justifying their deviance or bad behaviour as insignificant or even harmless (Harris & Magrizos, 2023). Visitors pick artefacts in protected areas justifying it as collecting travel souvenirs. Group size or effect may cause visitors to engage in DLPs. The group size gives some visitors the impression that they are anonymous and do not care about the image they project. Lastly, ethnocentrism motivates visitors to engage in irresponsible behavioural practices.

## 3. Material and Methods

In this section, the scope of the research, the research design, sampling and data collection and ethical considerations are probed.

### 3.1. Scope of the Research

Located in the Northeastern part of South Africa, in the provinces of Mpumalanga and Limpopo, the KNP covers an area of about 19,623 square kilometres and hence is the largest protected area in the country. Since its opening to visitors in 1927, KNP has developed to become one of the wildlife brands in Africa. The park showcases some of the most unique sensitive flora and fauna and has become a flagship of conservation and ecotourism. The park receives approximately 1.8 million visitors annually (SANParks 2022; Brett, 2022). The KNP is part of the Kruger to Canyons Biosphere Reserve, an area designated by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) as an International Man and Biosphere Reserve.

### 3.2. Research Design

This study adopted a quantitative approach, employing a positivistic exploratory approach through a survey research design. The quantitative research approach considers scientific explanation to be based on universal laws and aims to predict and control human behaviour (Fischer et al., 2023). Data were collected using a structured questionnaire made up of three sections. The first section of the questionnaire captures the demographic characteristics of the respondents. The second section of the questionnaire included 15 items selected from the KNP codes of conduct for visitors

and are used to measure DLP. 15 KNP codes of conduct were measured on a five-point Likert scale rather than a dichotomous scale of “yes” or “no”. The codes for the scale were interpreted as “Never” = 1, “Rarely” = 2, “Sometimes” = 3, “Often” = 4 and “Always” = 5. The codes were considered more appropriate for visitors to express their feelings towards acts which might be regarded as violating the rules. However, dependent variables (codes of conduct) were recorded as binary variables. For example, items to measure visitor compliance with codes of conduct in the KNP were combined so that 1 and 2 were coded as “no” while 3, 4 and 5 were coded as “yes”. The third section of the questionnaire asked respondents to choose one or more of the reasons linked to their failure to adhere to the codes of conduct. The reasons were measured on a dichotomous scale with “yes” indicating respondents felt the caused them to engage in DLPs while “no” indicated that they did not think it influenced them.

### 3.3. Sampling and Data Collection

The target population was visitors to the KNP which receives approximately 1.833 million visitors annually (SANParks 2022; Brett, 2022). Based on the target population, the sample size was 237 calculated based on a confidence level of 95%. Data collection took place in October of 2024 which is considered one of the best times to visit the park as vegetation is sparse enhancing the visibility of animals. Non-random sampling of systematic convenient and purposeful sampling was utilised for data collection. The researcher distributed the questionnaires with the help of a research assistant who was inducted. The questionnaire was physically and virtually distributed. Virtually, flyers containing a QR code for the online questionnaires were created and distributed at the main ports of entry (Paul Kruger, Malelane, Numbi and Phabeni). The researcher preferred the flyer to avoid causing traffic jams at the port of entry. The hard copies of the questionnaires were distributed at the rest camps (Pretoriuskop, Skukuza) and accommodation facilities (Skukuza Safari Lodge). Data was analysed by the researcher himself with the assistance of the Statistical Support Services at XXXX University. Descriptive statistics of frequency tables were used to analyse data. To compare the association of the reason for visitors engaging in DLP in KNP, a series of Chi-square analyses was conducted with post-hoc tests using Fishers’ exact pairwise comparison (Vaske, 2008). The analyses of variance were employed to compare the reason for compliance with 9 codes of conduct.

### 3.4. . Ethical Consideration

Participants who were 18 years and above were considered for the study. Participants were informed about the voluntary nature of the study and their right to withdraw without penalty. Anonymity was also guaranteed as no personally identifiable data was requested. The study was approved by the XXXX University Research Ethics Committee with ethics number HREC2024=08=016(MS).

## 4. Findings

### 4.1. Respondents’ Socio-Demographic Profile

A total of 237 completed questionnaires were collected and used for data analysis. The study results show that in terms of region of origin, over half of the respondents were domestic tourists (54%) while international visitors accounted for 46%. There was an equal split between males (49%) and females (49%). These findings were similar to Scholtz and Van der Merwe’s (2020) findings in the Pilanesberg National Park which show an equal share of the sample. The respondents were predominantly “active population” within the age group of 18-30 years (40%), followed by those between 51- 60 years (30%) and 41-50 years (19%). Almost half of the respondents were married (47%) while those who were single covered a significant percentage (40%). Respondents were generally literate as 23% of the sample held secondary/high school certificates, 19% held technical or vocational qualifications, 21% had undergraduate certificates and 25% held bachelor’s degrees. Respondents to the park preferred to travel with either family members, spouses/partners or friends. More than half

of the respondents in the sample were employed and the main purpose they visited the park was for relaxation.

4.2. Visitor Self-Reporting on DLPs

Respondents were asked to rate their adherence to KNP visitor codes of conduct to determine their participation in DLP. The codes of conduct were tested on a five-point Likert scale where 1 represented “Never” and 5 represented “Always”. To analyse the results, the 5 codes on the 5-point Likert scale were further classified into two mutually exclusive categories “yes” and “no”. “Never” and “rarely” were combined as “No” meaning that visitors complied with certain codes of conduct and hence did not participate in DLPs in the KNP. The codes “sometimes”, “often” and “always” were combined as “yes” meaning that visitors did not comply with the KNP codes of conduct and hence engaged in DLPs. The descriptive findings are presented in Table 2 below.

Table 2. Visitor participation in DLP in the KNP.

DLPs in Protected Areas based on the KNP Visitor Code of Conduct	No (Compliant)		Yes (non-compliant)	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Drive above the speed limit in KNP.	83	35	154	65
Not using water responsibly in the KNP.	82	35	155	65
Feed wild animals in KNP.	156	66	81	34
Get close to wild animals to take pictures.	19	8	218	92
Get out of the car to see the animals.	162	68	75	32
Miss gate closing time in KNP (camp or park gates).	97	41	140	59
Not using electricity responsibly in KNP.	99	42	138	58
Inappropriately disposing of waste in the KNP (littering)	73	31	164	69
Make a loud noise in KNP.	133	56	104	44
Purposely rushing to wildlife sights, knowing it would lead to crowding.	84	35	153	65
Stop in the middle of the road to observe wild animals.	27	11	210	89
Drive off the road to see animals in KNP.	68	29	169	71
Pick up objects to keep as souvenirs e.g., dead animal bones, horns etc.	187	79	50	21
Bring prohibited items into the park without declaring them e.g., pets, guns,	205	86	32	14
Fight or harass other visitors at sites.	214	90	23	10

Table 2 shows the self-reported compliance frequencies and percentages with the KNP codes of conduct. Respondent participation in DLPs in the KNP based on the park’s code of conduct varied significantly. Based on the total sample, 64% indicated that they did not comply with the speed limits in KNP implying that they engaged in DLP. A total of 36% of the respondents adhered to the code of conduct. In terms of responsible usage of water in the park, 65% of the respondents admitted to having used water unsparingly showing that a substantial number of visitors violate the code of conduct and hence engage in DLPs. Concerning the feeding of animals, 66% of the respondents claimed not to have fed them. The finding indicated that visitors to the KNP adhere to the code of conduct. A common violation of the KNP visitor code of conduct among respondents was getting close to animals to take pictures. A total of 9 out of 10 visitors violated this code of conduct.

A total of 68% of the respondents claimed to have complied with the code of conduct stipulating visitors not to get out of their cars to take pictures. These findings contradict the results of Liang et



al.’s (2019) study that used images on social media to examine misbehaviours in KNP. With a slight preponderance, 59% of the respondents confessed to failing to meet the gate closing time. Such a trend was also revealed in the use of electricity in the KNP with 58% of the responses accepting to have not adhered to the use of water responsibly. Out of the 237 respondents, 60% revealed to not have complied with the code of conduct concerning waste management in the park. Thus, a significant percentage of visitors to the park engaged in deviant leisure as the results indicate that 3 out of 5 visitors disposed of waste inappropriately. Regarding noise in the KNP, more respondents (56%) complied with the code of conduct and did not engage in this DLP.

In addition, 64 % of the respondents agreed to have rushed purposely to wildlife sights despite knowing it would lead to overcrowding. Interestingly, most respondents admitted having stopped in the middle of the road to observe wild animals. These results are not surprising with studies conducted on open safari vehicles revealing traffic congestion in the areas where wild animals are located (Van der Merwe, 2024; 2023). Most respondents admitted driving off-road to see animals (71%), which is against the park code of conduct. Picking up objects to keep them as souvenirs, bringing prohibited animals and harassing other visitors are acts of deviance which were considered uncommon practices by respondents. The majority (78%) of respondents claimed to have not picked objects in the KNP and hence adhered to the code of conduct. Finally, about 86% claimed to have not brought items not allowed in the park while 90% of respondents claimed to have not harassed other visitors.

4.3. Visitor Self-Reporting on Reasons for Engaging in DLPs

Of the 15 codes of conduct used to measure DLPs, we selected 9 that managers had reported as the most disobeyed by visitors and the most challenging. Respondents were asked to indicate one or more reasons that might have influenced them to participate in DLPs (not complying). “No” indicated that the visitor did not feel the reason was valid to them while “yes” indicated the reason was applicable to them. Table 3 shows the frequency of “Yes” and “No”.

Table 3. Reasons for visitors engaging in selected DLPs.

Reasons for engaging in DLP	Frequency (N)		Percentage(%)	
I drove above the speed limit because -----	No	Yes	No	Yes
An emergency is out of control.	157	80	66	34
To make time for the gate closing time (at the camp or park gates)	141	96	59	41
I got distracted or didn’t realise I was speeding.	141	96	59	41
I did not think it mattered.	211	26	89	11
There was no law enforcement around so I wouldn’t be caught.	227	10	96	4
I used water unsparingly in the KNP because -----				
I am generally not mindful of such practices while on holiday.	198	39	84	16
I follow the same habits when I am at home.	184	53	78	22
I was not aware of the importance of conserving water in the park.	187	50	80	21
Lack of water-saving mechanism available.	113	124	48	52
I fed animals in KNP because -----				
Most people around me were feeding them.	222	15	94	6
Food is valuable to animals and feeding is a sensible thing to do.	193	44	81	19
I felt personally obliged to feed animals as I feed them at home.	173	64	73	27
Food does not harm animals.	155	82	65	35
I got close to wild animals because -----				
I have an emotional affinity or proximity towards them.	218	19	92	8
I wanted to create memorable experiences in KNP.	94	143	40	60
I was in the ‘holiday mode” and not mindful.	99	138	42	58

<b>I stopped in the middle of the road and climbed out of the car sunroof because -</b>				
Circumstances out of control (it is hot in KNP and hence wanted fresh air).	150	87	63	37
I wanted to see the animal at close range.	80	157	34	66
I am used to my old habits of climbing out of my car sunroof.	186	51	78	22
<b>I missed gate closing time (camp or park gates) because -----</b>				
-----				
I was lost while driving in the park.	205	32	87	13
I did not think being late would affect anyone in the park.	207	30	87	13
The closing times are unrealistic as animals roam in the late hours.	205	32	87	13
I was hoping to find more animals	127	110	54	46
I got stuck in traffic at a wildlife sighting	181	56	76	24
<b>I used electricity unsparingly because -----</b>				
-----				
I had paid for it when I paid for this trip hence I was using my money.	219	18	92	8
I lacked awareness of the need to save electricity.	198	37	84	16
I am used to my old habits of not saving electricity.	194	43	82	18
A few gadgets in the park save electricity.	119	118	50	50
<b>I littered because -----</b>				
-----				
The refuse bins were few in the areas I visited.	134	103	57	43
My close friends were littering.	181	56	76	24
There are people employed in the park to pick litter.	207	30	87	13
There is no incentive for not littering in KNP.	152	85	64	36
I have negative emotions about animals.	232	05	98	2
<b>I got into an overcrowded area and made a loud noise because -----</b>				
-----				
It is pleasant to be overcrowded and make noise while on holidays	194	34	82	18
It was because of circumstances out of my control.	146	91	62	38
My friends and family members were making loud noises.	135	102	57	43

Perceived reasons for respondents not adhering to codes of conduct in the KNP and engaging in DLPs vary with the types of code of conduct (DLPs) (Table 3). Concerning driving over the speed limit in the park, visitors to KNP were least likely to agree on their justifications. From the 5 proposed reasons respondents indicated to justify driving over the speed limit, 41% of the respondents indicated “the need to make time for the gate closing time (at the camp or park gates)” and “I got distracted or didn’t realise I was speeding.” The reason which had the lowest percentage was “there was no law enforcement around so I wouldn’t be caught”. Respondents showed a significantly higher level of agreement with “lack of water serving mechanism” (52%) as a reason which caused them to use water irresponsibly in the KNP. The reasons “I am generally not mindful of such practices while on holiday” (22%) and “I follow the same habits when I am at home” (21%) received considerably higher percentages of respondents on the subject matter. 35% of the respondents indicated to have fed animals as they felt that it was not going to harm them in any way. Most respondents agreed on “I wanted to create memorable experiences in the KNP” (60%) and “I was in ‘holiday mode’ and not mindful” (58%) as their silent reasons for getting close to animals. Concerning the missing gate closing time, a number of the respondents (46%) indicated “I was hoping to find more animals” as their reason. “I got stuck in traffic at a wildlife sighting” also appeared as a common reason among respondents with 26% highlighting this reason. Half of the respondents used “lack of electricity-saving gadgets” to justify the use of electricity unsparingly in the KNP. On littering in the KNP, 43% indicated that their littering was instigated by a close friend who littered and 36% indicated having

a negative affinity for animals. A total of 38% indicated getting into overcrowding and making noise as a result of the influence of their friends and family.

#### 4.4. Fisher's Exact Test for the Association Between Complaint and Non-Compliance

A Fisher's Exact Test was used to determine whether or not there is a significant association between categorical variables. In this study, a Fisher's Exact Test was conducted to determine the association between complaints (good and bad behaviour) and the reasons used by respondents to justify their failure to comply with specific codes of conduct.

**Table 4.** Fisher's Exact Test on visitor reason for not adhering to different codes.

Deviant leisure practice and the reasons	Good behaviour	Bad behaviour	Exact Sig. (1- sided)	Exact Sig. (2- sided)
<b>I exceeded the speed limit in the park due to -----</b>	%	%	<b>p</b>	<b>P</b>
An emergency is out of control.	No 42 Yes 61	58 39	0.004	0.006*
To make time for the gate closing time (at the camp or park gates)	No 45 Yes 54	55 46	0.096	0.186
I got distracted or didn't realise I was speeding.	No 43 Yes 56	57 44	0.033	0.064
I did not think it mattered.	No 46 Yes 73	54 27	0.007	0.012*
There was no law enforcement around so I wouldn't be caught.	No 48 Yes 70	52 30	0.143	0.205
<b>I used water unsparingly in the KNP because -----</b>				
I am generally not mindful of such practices while on holiday.	No 45 Yes 64	55 36	0.025	0.037*
I follow the same habits when I am at home.	No 47 Yes 55	53 45	0.193	0.351
I was not aware of the importance of conserving water in the park.	No 48 Yes 50	52 50	0.469	0.874
Lack of water-saving mechanism available.	No 42 Yes 55	58 45	0.028	0.051
<b>I fed animals in KNP because -----</b>				
Most people around me were feeding them.	No 47 Yes 73	53 27	0.042	0.061
Food is valuable to animals and feeding is a sensible thing to do.	No 46 Yes 61	54 39	0.042	0.067
I felt personally obliged to feed animals as I feed them at home.	No 39 Yes 73	61 27	0.000	0.000*
Food does not harm animals.	No 37 Yes 71	63 26	0.000	0.000*
<b>I got close to wild animals because -----</b>				
I have an emotional affinity or proximity towards them.	No 48 Yes 58	52 42	0.270	0.476
I wanted to create memorable experiences in KNP.	No 35 Yes 57	65 43	0.001	0.001*

I was in the 'holiday mode' and not mindful.	No 44 Yes 52	57 48	0.1160.191
<b>I stopped in the middle of the road to observe animals because --</b>			
Circumstances out of control (it is hot in KNP and wanted fresh air).	No 42 Yes 60	58 40	0.0060.010*
I wanted to see the animal at close range.	No 43 Yes 52	57 48	0.1180.217
I am used to my old habits of climbing out of my car sunroof.	No 46 Yes 57	54 43	0.1180.207
<b>I missed the gate closing time (camp or park gates) because</b>			
I was lost while driving in the park.	No 44 Yes 78	56 22	0.0000.000*
I did not think being late would affect anyone in the park.	No 47 Yes 60	53 40	0.1250.241
The closing times are unrealistic as animals roam in the late hours.	No 49 Yes 44	51 56	0.3490.575
I was hoping to find more animals	No 44 Yes 54	56 46	0.0910.154
I got stuck in traffic at a wildlife sighting	No 44 Yes 63	56 37	0.0120.021*
<b>I used electricity unsparingly because -----</b>			
I had paid for it when I paid for this trip hence was using my money.	No 47 Yes 61	53 39	0.1930.193
I lacked awareness of the need to save electricity.	No 46 Yes 59	54 41	0.1050.165
I am used to my old habits of not saving electricity.	No 46 Yes 58	54 42	0.1100.180
A few gadgets in the park save electricity.	No 39 Yes 58	61 42	0.0020.003*
<b>I littered because -----</b>			
The refuse bins were few in the areas I visited.	No 41 Yes 58	59 42	0.0060.009*
My close friends were littering.	No 44 Yes 64	56 36	0.0050.009*
There are people employed in the park to pick litter.	No 48 Yes 52	52 48	0.005 <sup>0.009*</sup>
There is no incentive for not littering in KNP.	No 41 Yes 62	59 38	0.001 <sup>0.002*</sup>
I have negative emotions about animals.	No 49 Yes 40	51 60	0.5281.000
<b>I got into an overcrowded area and made a loud noise because ---</b>			
It is pleasant to make noise while on holiday.	No 43 Yes 74	57 26	0.0000.000*
It was because of circumstances out of my control.	No 40 Yes 62	60 38	0.0010.002*
My friends and family members were making loud noises.	No 37 Yes 64	63 36	0.0000.000*

Using a significance threshold of 0.05, variations were revealed in justifying the decision to exceed the speed limit in the Kruger National Park (KNP). The variables "An emergency out of control" and "I did not think it mattered" revealed *p*-values of 0.006 and 0.02 which are less than the

threshold of 0.05. Thus, the results show a statistically significant association. Apart from these reasons, the other variables (reasons) had  $p$ -values higher than 0.05 meaning there is not a statistically significant difference. “To make time for the gate closing time at the camp or park gates” ( $p$ -value = 0.186), “I got distracted or didn’t realise I was speeding” ( $p=0.064$ ), and “there was no law enforcement around so I wouldn’t be caught” ( $p=0.205$ ) had  $p$ -values higher than 0.05. Thus, evidence is absent for an association between respondents who complied and those who did not. Under the use of water unsparingly in the KNP, “I am generally not mindful of such practices while on holiday” revealed a  $p$ -value less than 0.05 (0.037), which indicates that there is a relationship between compliance and non-compliance. The reasons for feeding animals in the park which were statistically significant with a  $p$ -value less than 0.05 were “I felt personally obliged to feed animals as I feed them at home ( $p$ -value = 0.000) and “Food does not harm animals” ( $p$ -value = 0.000).

Concerning respondents getting close to animals, the variable “I wanted to create a memorable experience” revealed a  $p$ -value of 0.001 which is less than 0.05. This indicates that there is evidence of an association between respondents engaging in destructive/unacceptable behaviour and engaging in good behaviour. Another association was revealed in the variable “stopping in the middle of the road to observe animals”. The reason “circumstances out of control” revealed a  $p$ -value of 0.001 less than 0.05. Under the reasons why respondents missed the gate closing time, the variables “I was lost while driving in the park” and “I got stuck in traffic at a wildlife sighting” generated  $p$  = values of 0.000 and 0.021 respectively. The  $p$ -values are less than 0.05 reflecting a significant association. The availability of fewer gadgets to save electricity regarding the use of electricity irresponsibly revealed a  $p$ -value of 0.002 which is less than 0.05. On littering and overcrowding, most of the reasons recorded  $p$  = values less than 0.005 reflecting a strong association of variables. This also applied to the reasons why respondents got into an overcrowded area and made a loud noise in the KNP where all of the reasons revealed  $p$ -values less than 0.005.

## 5. Discussions and Recommendations

KNP is one of the must-see national parks in South Africa. The park preserves some of the most extensive tourism resources attracting over a million visitors annually. Many visitors and their associated practices in the park are a cause of concern due to practices that do not align with the visitor codes of conduct. Anecdotal information suggests that visitors are not adhering to the codes of conduct in the park. As such visitors are known to overspeed, make a loud noise, feed animals, get close to animals, litter and drive off the roads. Most of these DLPs are against the codes of conduct and are detrimental to the sustainability of tourism resources in the park.

Socio-demographic findings revealed that more than half of the respondents were domestic visitors; thus, there is a need to intensify education and awareness among domestic visitors. Regarding age, the KNP is a favourable destination for the “active population” probably because of the activities on offer. Most of the respondents travelled with their family members, partners or friends. Most people visiting the KNP are employed.

Out of the 15 visitor codes of conduct used to determine adherence/compliance and deviance in the KNP, the respondents revealed that they did not adhere to 9 of these codes. Such a high number indicates that visitors engage in DLPs in the KNP. The codes of conduct that most visitors did not adhere to were: “not getting close to animals taking pictures”, followed by “not stopping in the middle of the road to observe wild animals in the park”. These practices are highlighted in other previous studies by Liang et al. (2019); and Van der Merwe (2020; 2024). Most respondents claimed to have taken pictures close to dangerous wild animals to create memorable experiences and ‘instagrammable’ moments. To prevent visitors from disobeying codes of conduct and engaging in DLPs, the study recommends that the KNP authorities formulate strategies to enforce the law. The park managers and other responsible stakeholders should also educate visitors regarding the dangers of getting close to wild animals. More importantly, there is a need to clarify some of the codes of conduct to avoid subjectivism. It is suggested that more clarity be provided to visitors through intensive codes of conduct awareness. For instance, visitors are advised not to get close to dangerous animals, but the distance from an animal is not stipulated. This will enable visitors to interpret the



code of conduct better. Another grey area is that of noise. The code of conduct might be confusing as what is noise to one person might not be perceived as noise by someone else, depending on the situation. The study recommends penalties to be imposed and implemented. In an era of technology, devices should be inserted in the park to pick up those incidents and those who commit them.

While the study results revealed marginal differences between adherence and non-adherence (51% and 48%), it is the management who needs to decide if attention is required. However, one might pose an argument based on the broken window theory which suggests that if bad things are left unsolved in the environment, they will attract more and more problems. A broken window is just the first step and other evidence of decay will gradually appear. If there is a cigarette but somewhere, slowly there will be more cigarette butts in the area. In the study context, if fewer visitors do not adhere to the codes of conduct and engage in DLPs, others will not take long to copy their behaviour. The signs of littering in scenic areas are more likely to induce more littering and less environmentally responsible behaviour. A marginal difference may suddenly become big, based on others not taking too long to copy the negative behaviour. Therefore, this study recommends that the KNP authorities increase law enforcement in the park to lessen visitor participation in DLPs that violate the codes of conduct in the park.

This study is the first to theorise and contextualise DLPs. Unlike previous studies documenting DLPs independently, this study explored different DLPs. As such the study theoretically contributes to knowledge by exploring criminology in tourism through the framework of deviant leisure practices. To this end, we investigated different DLPs and their causes in the KNP. This study is the first to measure DLPs in the KNP using the codes of conduct.

## 6. Study Limitations

Like any research, this study has some limitations. Firstly, the study used self-reported questionnaires to investigate visitor adherence to the codes of conduct to establish DLP in the KNP. In studies of this nature where respondents report on issues of violation, respondents may exaggerate or underreport compliance. This might have happened in this study despite the researcher's use of a 5-point Likert scale to report dichotomous answers. Another limitation of the study was that the results did not indicate the extent of adherence or non-adherence. Instead, the study revealed the percentage of the participants but did not show the adversity of their deviance. The research was also based on the southern part of the KNP where situational factors might differ from other parts of the park. Lastly, the study utilised a quantitative approach, future research using qualitative research would provide better insight into adherence and DLP in KNP.

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