Wildlife Tourism Resources Development:
A Case Study of Beijing Wildlife Park

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Abstract

In this era of mass tourism, and to create social and financial benefits, it is useful to clarify the positive and negative aspects of animal tourism resources. Following the principles of environmental protection, public relations methods can make the most of existing animal tourism resources from the perspectives of tourists, aid government bodies to strengthen scientific methods of animal production, help promote scientific knowledge of the ecological environment, and stimulate animal protection education. However, with information on visitors' positive and negative comments about captive wildlife attractions, operators may identify other actions they need to take. Using netnography to extract meaning from online conversations, this study used qualitative methods to collect data from the online comments on two Chinese travel applications (apps) and conduct a thematic analysis to identify the main themes in the data. This study investigates the development of the wildlife tourism resources at Beijing Wildlife Park (BWP), and aims to determine the means of sustainable development of the BWP.

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INTRODUCTION

The increasing desire to interact with wildlife has resulted in the emergence of various wildlife tourism activities (Semeniuk et al., 2010). One estimate of the number of people visiting zoos worldwide is 600 million people per annum (Smith, 2013). Cong et al. (2014) reported that wildlife tourism in China attracts increasing public and commercial interest, and noted that wildlife tourism is important in producing financial benefits as well as the conservation of Chinese protected areas. If operated responsibly, wildlife tourism can create significant financial benefits for local areas (Ballantyne & Packer, 2013), and contribute to conservation efforts.

Thanks to captive wildlife tourism, visitors can see rare animals that are not common, or difficult to access in the wild, and captive wildlife attractions can attract more visitors due to the inexpensive nature of the experience (Hughes et al., 2005). However, in captivity, various factors, such as enclosure designs and keepers' routines, may limit animals' opportunities to engage in some behaviours, such as appropriate foraging (Hill & Broom, 2009). Although zoos are in a unique position to offer opportunities for interaction, in China, there is growing criticism of zoos and wildlife parks (Ye, 2007). In order to educate and influence the public on issues affecting wild animals in wildlife-based organisations, (Waza, 2005). Because of the unique position of zoos, this study uses a zoo as a study site.

This study uses Netnography, which as an online research method is able to accommodate the constantly changing virtual landscape of tourism (Munar et al., 2013), and can help to gain insights into tourists' opinions expressed on online platforms. Using the case study of the Beijing Wildlife Park (BWP), and applying a qualitative approach to collecting and analysing the online comments on two Chinese travel apps (Ctrip and Qunar), this research employs thematic analysis to clarify the main themes in the comments. And in so doing, the park works towards its sustainable development, which can give assistance to BWP and to other similar captive wildlife attractions in China.

CAPTIVE WILDLIFE ATTRACTIONS: THE CONTEXT

Positive Aspects of Captive Wildlife Attractions

Animal Protection

As a kind of modern Noah's Ark, a zoo may be a place of last refuge for threatened wildlife, and can preserve a breeding population which can be used for future restocking of the wild (Frost, 2011). Reportedly, US$350 million is spent on wildlife protection by the world zoo and aquarium community each year (Gusset & Dick, 2011). Many zoos actively participate in conservation initiatives, such as breeding programmes, and in situ habitat and species conservation projects (Weiler & Smith, 2009) to save threatened species. In China, for example, the Chengdu Research Base of Giant Panda Breeding site aims to breed and protect giant pandas through breeding programmes. Furthermore, through an analysis of pedigree records, the conservation breeding programmes at zoos maintain the retention of population genetic diversity (Ito et al., 2017).

Popular Science Education

Modern zoos aim to educate visitors about their animals and their wild counterparts' conservation demands, while showing appreciation for wildlife in general (Godinez & Fernandez, 2019). Indeed, a study on a German wildlife park, Lück and Gross (2016) found that visitors particularly agreed that "wildlife parks, zoos and aquaria have a duty to teach children how to behave correctly around animals" (mean score of 1.63 out of 4). A well-designed education/interpretation programme for zoo visitors can not only bring more recreational experiences to visitors, but also help them appreciate wildlife better (Higginbottom et al., 2003). Zoos and aquariums have adopted various methods for introducing animals to their visitors (Ballantyne et al., 2007). For example, in Australia, it was observed that zoos try hard to encourage emotional responses in their visitors, and appropriate reactions in support of conservation through animal exhibits, signage, and other material about endangered species and habitats (Beri et al., 2010).

Economic Benefits

In its diverse forms, wildlife tourism brings tremendous wealth globally to both developed and less developed countries (Tisdell, 2010). Money received

from tourism operations can be used to undertake many projects, as well as creating job opportunities, adding to incomes, and boosting local economies. In Australia, the total income of zoos is around US$ 300 million annually, and zoos create about 5,300 job opportunities, with 3,700 full-time jobs and 1,600 part-time jobs (Beri et al., 2010). Economic funds generated by zoos can also be used to support the role of zoos in conservation, education, and research work (Frost, 2011), aiming to protect wildlife.

Entertainment Value

Throughout the history of zoos, the common theme is the zoo as a site for human leisure and entertainment (Carr & Cohen, 2011). Exciting things can be seen at a zoo, such as little cubs being born or trying their first steps, or a gorilla taking "selfies" (Gross, 2015). Visitors are attracted to zoos largely because they can be regarded as a form of tourism in nature, so zoo animals can offer visitors opportunities to reflect on their relationships with the natural world (Fraser et al., 2007). Getting close to real "wild" animals can offer opportunities for entertainment (Mason, 2007).

Negative Aspects of Captive Wildlife Attractions

Physical and mental health issues

After being captured and kept in captivity, then transported and released in new areas, wildlife inevitably experiences stress at all stages of the process (Keulartz, 2015). The chronic stress caused by such relocation makes the individuals more vulnerable, and therefore, makes it more difficult for the population to become self-sustaining (Dickens et al. 2010). Zoos have long kept wildlife in captivity, which often does not resemble their natural habitats and modify their natural habits. To mitigate the impact of the captive environment, modern zoos try to create spatial control through either invisible barriers, such as sunken enclosures, or the utilisation of a behavioural characteristic of the target species (Shelton & Tucker, 2007). However, reproducing the natural environment can bring risks and problems, as there are many conditions that cannot be easily simulated in a zoo, such as climate, migration, bacteria, or hunting behaviour.

Breeding Issues

A number of issues related to breeding programmes in captivity have been identified in the research literature. Even if there are well-run captive breeding programmes in zoos to help maintain the survival of endangered species, such programmes are not always successful, as some animals are sensitive and tend to die soon after capture, despite many years of efforts to maintain such animals captive (Catibog-Sinha, 2008). Also, captive-born animals perform extremely badly in the natural environment, so they need to be prepared extensively for release, which requires resources that may be not available and are not usually relaxing for the animals (Browning, 2018). Surpluses can also occur despite carefully controlled breeding programmes (Browning, 2018). For the animals that are no longer economically useful to a zoo, it is common to be killed, recycled (by feeding them to their predators, for example), or sold to farms and self-funded hunting clubs (Bisgould, 2014).

Abuse of Animals for Economic Purposes

Contrary to their protection and research claims, some zoos' practices reveal that their captives are merely objects of economic interest (Montford, 2016). Animals may be trained in various postures to greet people and perform shows, and are kept in cages. Captive wild animals in many zoos in China and Vietnam are forced to do entertaining performances in an unnatural, degrading, and stressful circus-style way (AnimalsAsia, n.d.). Zoos also use surplus animals to generate profits by selling them. Other strategies include housing them in other zoos, selling them to dealers, implementing managed euthanasia (i.e., culling), transferring animals to non-zoo holders, and in a few cases, releasing them to the wild (Carter & Kagan, 2010). There are also different kinds of zoos used to generate profits, such as roadside zoos and mini zoos in supermarkets, which leave animals in misery.

Balancing Economics with Conservation

One of the most major challenges modern zoos face is the problem of balancing conservation aims with financial imperatives (Catibog-Sinha, 2008). Even if zoos can use visitor fees to pay operating expenses, they are not necessarily able to support other conservation initiatives (Catibog-Sinha, 2008). According to Teeboom (2018), opening a zoo, even a small petting zoo, requires a lot of human and material resources, and the costs are immense. Large

investments may bring significant short-term benefits, but ultimately, zoos may face economic loss if visitor numbers drop. If zoos cannot make self-sustaining profits, it is difficult for them to survive, let alone make social and environmental contributions.

Sustainable Development of Captive Wildlife Attractions

A substantial number of studies demonstrate that the steady operation of the Earth's systems which include the atmosphere, oceans, forests, waterways, biodiversity and biogeochemical cycles, is a prerequisite for a prosperous global society (Griggs et al., 2013). Over the past centuries, the irrational and fast development of human society has threatened the stability of the natural environment in all areas of the Earth. Through internationally coordinated actions, the Sustainable Development Goals (SDGs) launched by the United Nations in 2015 were designed to address these risks, and include the goal to end biodiversity loss (United Nations, 2020). As one of the driving forces of the global economy, the tourism and hospitality industry causes significant environmental and social impacts in many ways (Jones et al., 2017). It is advisable for tourism or hospitality businesses to adapt their business strategies to meet the SDG goals, such as by developing innovative products and services and contributing to quality education and learning opportunities.

Economic Sustainability

There are different drivers for the economic sustainability of the tourism industry. Seasonal operations of tourism, which cause decreased occupancy rates, transportation problems, and increased high season prices, have been identified as an important barrier to the sustainable development of the tourism industry (Shen et al., 2017). According to Logar (2010), the quality of accommodation facilities and sufficiency of a trained workforce were also considered as factors influencing the economic sustainability of tourism attractions. According to Giannoni and Maupertuis (2007), the balance between tourism investments and environmental protection is important for ensuring the sustainability of population-based income. Developing tourism products must be based on meeting the needs of customers in order to achieve economic sustainability (Jaafar & Maideen, 2012). Also, zoos based on local bioregions is a developing trend (Frost & Roehl, 2007).

Animal Physical and Mental Health

It is important for designers and managers of wildlife tourism experiences to make sure that such experiences are educational in nature and delivered in a responsible way (Ballantyne et al., 2011). At some zoos, animals are kept in small, barren, and lonely settings, whereas other zoos have invested in building an artificial setting which is as close to nature as possible, to reduce animal stress while offering visitors better leisure and learning experiences (Catibog-Sinha, 2008). As a typical example, a wildlife park is a large, enclosed area resembling animals' natural habitat as closely as possible, in which animals are not caged and can roam freely.

Popular Science Education

People's awareness of wildlife conservation can be enhanced when interacting with animals. With the increasing consciousness of animal welfare, Catibog-Sinha (2008) believed that incorporating animal welfare concerns into the design of animal settings would not only educate visitors about the ecology of the animals, but also help them know more about the difficult situations endangered animals face. In China, it was found that the most effective way for visitors to gain knowledge is to read interpretative media, followed by obtaining views and information from observing animals, or from partners, other tourists, or zoo employees (Cong et al., 2017). Using the most effective method according to the context, can increase the spread of wildlife protection knowledge.

Government Planning and Management

Governments at all levels have taken greater responsibility for, and involvement in, the planning and development of tourism destinations (Ruhanen, 2013). Through implementation of suitable policies to mitigate potential negative impacts, planning and management measures can be customised to meet the development needs of a sustainable wildlife tourism industry (Rodger et al., 2007). According to Xiumei and Feng (2008), the construction of wildlife parks in China is still in its development process and there are some problems. To deal with such threats, the Chinese government implemented the Wildlife Conservation and Nature Reserve Construction Project and the Special Fund for Capacity Building of National-level Nature Reserves in 2001 (Cong et al., 2017).

Background to the Research

Study site

At Beijing, there are three zoos – Beijing Zoo, Badaling Safari World and Beijing Wildlife Park (BWP, Figure 1). The BWP is located in the Wanmu Forest, Daxing District, 40 km from central Beijing (Travel China Guide, 2019). The Park has more than 10,000 animals of around 200 animal species, 42 of which species are from foreign countries. There are more than 30 themed animal venues, and the Park has three kinds of vehicles: electric battery cars, small trains, and an animal-viewing bus, all of which can be hired.

Figure 1: Map of Beijing Wildlife Park
Note. From Travel China Guide, https://www.travelchinaguide.com. Copyright (2020) with License Number: L-SNX00052

RESEARCH METHODOLOGY

The study employed qualitative research methods, which aim to examine the interconnections in a sea of data, whereas quantitative methods try to separate out pieces of data (Meyer & Avery, 2009). The qualitative approach in this research helps to understand visitors' views and perceptions of BWP by comparing and analysing the interconnections between a great number of comments. Due to China's strengths in information and technology, more and

more people like to share personal views on online platforms. Online reviews are essential business managers, as they express users' true feelings (Li et al., 2013). Netnography is a term composed of the internet and ethnography, and is a method for systematically analysing online communities (Belz & Baumbach, 2010). Comprehensive and detailed netnography can reflect information about consumer opinions, behaviours, impressions, tastes, and interactions (Kozinets, 2010).

Thematic Analysis

Data from the online comments were investigated using thematic analysis, a common method of qualitative analysis that can be adopted to identify, analyse, and represent themes or patterns within data (Bowen et al., 2012; Braun & Clarke, 2006). There are six phases of thematic analysis: getting familiar with data, creating initial codes, searching for themes, reviewing themes, defining and naming themes, and generating the results (Braun & Clarke, 2006). After strictly following these six phases, user comments were sorted into different themes related to the positive and negative aspects of BWP.

Reliability

For users, it is convenient to post their personal experiences on online review sites. However, concerns about false reviews are valid because a personal experience is subjective and not verifiable (Chen et al., 2019). Also, some online comments may be manipulated for various reasons. Monitoring web-based content is almost non-existent, allowing readers to make decisions based on false or biased information (Metzger et al., 2010). Therefore, online comments from only one app may not be reliable. Consequently, data in this study were gathered from two popular Chinese travel apps to enhance the reliability of the research: Ctrip and Qunar.

Collection of Textual Information

Two apps, Ctrip and Qunar, were chosen. On these two apps, comments were already classified into different categories. As the study aimed to contribute to the sustainable development of BWP achieve its sustainable development by analysing its positive and negative aspects, positive and negative comments were the most valuable. Therefore, online positive and negative comments about BWP on the two apps were collected and analysed.

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The Ctrip App

Up to 14th August 2020, there were 14,501 Chinese comments on BWP with 14,243 positive comments, and 258 negative comments. Due to the high numbers of comments, the most recent 250 positive comments and 250 negative comments were used for analysis. Theoretically, there should be 250 different users making 250 different positive comments. However, in practice, users often made more than one comment or made the same comment repeatedly. Comments that did not make sense were removed. After keeping the first of identical comments made by the same users at the same time and removing meaningless comments, there were 191 different users, making 221 different positive comments with 6,253 Chinese words. There should also have been 250 different users making 250 different negative comments. However, after keeping the first one of the same comments made by the same users at the same time and removing meaningless comments, there were 227 different users making 241 different comments, resulting in 7,502 Chinese words.

The Qunar App

As of 15th August 2020, there were 41,114 Chinese comments on BWP with 41,060 positive comments and 54 negative comments. The previous year's positive comments available on the app were collected and analysed. Regardless of time, all the negative comments available on the app were collected and analysed. From 14th August 2019 to 15th August 2020, there were 88 positive comments, with 7,442 Chinese words. In practice, as before, some users made more than one comment or made the same comment at the same time, which could not be ignored. The comments that did not make sense were also removed. This left 79 different users making 85 positive different comments, with 7,231 Chinese words. There were 54 negative comments, with 3,998 Chinese words. In practice, there were 50 different users making 54 different comments, with 3,991 Chinese words available for analysis.

Text Frequency Analysis

To effectively exploit corpora, frequency-ranked word lists have long become part of the standard approach (Baron et al., 2009). The text data were analysed using GooSeeker, which is Chinese scraping software for content analysis, qualitative research, text analysis and so on. To produce the best interpretable results from this text-mining analysis, there are several steps

needed.

(1). Meaningless words that made no contribution to the interpretation of the text need to be removed. Therefore, words such as "我" (I), "你"(you), "他"(he), "她"(she), "他们"(they), "它"(it), "我们"(us), "是" (am, is, are), and similar others, were removed.

(2). Avoid separate counts where the spelling of scenic spots is inconsistent and different, e.g., "野生动物园" (the wildlife park), "动物园" (the zoo), and "北京野生动物园" (BWP).

(3). Group terms that have similar meanings, but are expressed in different words, e.g., "照相机" (camera) to "相机" (camera), "宝宝" (baby) to "婴儿"(baby), and "老人" (the elderly) to "老年人" (the elderly).

Coding and Analysis

Thematic analysis in this study had three main stages. In the first stage, codes were assigned to relevant and key pieces of information (Giles et al., 2015). At the end of this first step, 221 Ctrip positive comments had 221 Chinese codes, 241 Ctrip negative comments had 241 Chinese codes, 85 Qunar positive comments had 85 Chinese codes, and 54 Qunar negative comments had 54 Chinese codes. This second step aimed to classify the free codes, by continuously comparing and analysing the connections within the codes (Cong et al., 2014). When this had been completed, the Ctrip 221 and 241 free codes were reduced to 21 (see Table 1) and 39 (see Table 2) interpretive codes, respectively. From Qunar, 85 and 54 free codes were reduced to 21 (see Table 3) and 23 (see Table 4) interpretive codes, respectively. In the final stage, to best describe the data, codes were categorised into significant analytical themes (Thomas & Harden, 2008). Based on the categorisation of codes, seven themes were generated: "visitor experience," "animal condition," "facilities," "management," "environment," "service," and "other," showing BWP from seven different perspectives (see Tables 1-4).

Table 1: Ctrip Positive Comments

Ctrip Positive Comments (n=221)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• fun, good view, good experience, recommend (n=128) • children, adults, and the elderly, having fun (n =27) • could interact with and feed animals (n=12) • good experience in self-drive and walking routes (n=8) • visited many times (n=6) • not crowded during non-holidays (n=2) • not expensive (n=2) • good indoor design (n=1)	Visitor experience	186	84.16
• a lot of energetic, healthy, and friendly animals (n=3)	Animal condition	3	1.35
• safe animal-viewing bus (n=5) • good and big park (n=5) • big carpark (n=1) • creative entrance and isolation (n=1) • good playground for children (n=1) • small train (n=1)	Facilities	14	6.33
• convenient check-in (n=5)	Management	5	2.26
• fresh air, clean environment, good green plants (n=3) • good shade from strong sun (n=1)	Environment	4	1.8
• good service (n=2)	Service	2	0.9
• advice (n=4) • non-relevant (n=3)	Other	7	3.2

Table 2: *Ctrip Negative Comments*

Ctrip Negative Comments (n=241)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• expensive entrance ticket, products, and activities, charged expensive fees (n=26) • poor experience, low cost performance, poor enjoyability (n=25) • crowded (n=21) • disappointing self-drive due to traffic jams, unclear traffic signs and few animals (n=21) • too many people during holidays (n=21) • long waiting time for small trains and viewing cars (n=18) • difficult to interact with animals (n=5) • viewing buses were too quick (n=3) • location too far away (n=3) • no preferential policy for medical staff during pandemic, nor discounted tickets for children and the elderly (n=2) • inadequate scenic spots (n=1) • poor play area design (n=1) • too much noise (n=1)	Visitor experience	148	61.41
• not many animals (n=11) • lazy and unhealthy animals (n=4) • animal attacks (n=3) • poor animal shows (n=2) • animals in the wildlife area were fenced in ditch (n=1) • animals were fed too much during holidays (n=1)	Animal condition	22	9.12

Ctrip Negative Comments (n=241)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• not enough viewing vehicles (n=4) • no bathroom around the parking area (n=1) • automatic check-in machine was not working (n=1) • animal-viewing truck was not electric, too much noise and pollution (n=1)	Facilities	7	2.9
• problems with the management of entrance, exit, small trains, wildlife area and parking: waiting time was too long; people jumping the queue; crowded when boarding (n=11) • unable to bring vegetables from outside (n=3) • self-drive cars required extra expensive parking fees (n=3) • could only feed designated animals (n=1) • eating and shopping mainly required cash (n=1)	Management	19	7.9
• poor air (n=1) • some animal houses had strong odours (n=1) • too much rubbish (n=1)	Environment	3	1.24
• unclear information about cars, activities, and tickets (n=7) • no phone signal (n=2) • information not updated, such as location and content (n=1) • poor staff service (n=1) • poor online audio commentary (n=1) • only junk food and not many resting areas (n=1)	Service	13	5.4
• complaints about Ctrip app (n=22) • non-relevant (n=7)	Other	29	12.03

Table 3: *Qunar Positive Comments*

Qunar Positive Comments (n=85)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• good experience with self-drive, small trains and safe animal-viewing bus (n=18) • children, adults and the elderly had fun (n=10) • no waiting time for small train and viewing bus during non-holidays (n=5) • good experience interacting with and feeding animals (n=3) • not too many people during non-holidays (n=3) • not expensive (n=2) • not far from Beijing city (n=1)	Visitor experience	42	49.4
• a lot of lovely animals (n=2)	Animal condition	2	2.4
• park is big (n=5) • helpful battery car (n=5) • clean and safe facilities (n=1)	Facilities	11	12.9
• convenient check-in (n=8) • free ticket policy for children under 1.2 metres (n=1) • good management (n=1) • animal-viewing buses arrived on time (n=1)	Management	11	12.9
• good view (n=1)	Environment	1	1.2
• good staff service (n=9) • children's meals provided in the park (n=1)	Service	10	11.8
• comments on Qunar app (n=4) • non-relevant (n=3) • advice (n=1)	Other	8	9.4

Table 4: *Qunar Negative Comments*

Qunar Negative Comments (n=54)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• too many people and cars during holidays (n=9) • long waiting time for small train and bus (n=5) • not good (n=5) • expensive ticket, complaints about the ticket policy for children and the elderly (n=2) • meaningless self-drive as could not feed animals (n=2) • not a wildlife park, just a zoo (n=1) • safety issues in the parking area (n=1) • a little too far away (n=1) • the park is small (n=1)	Visitor experience	27	50
• not many animals and lazy animals (n=1) • poor animal shows (n=1)	Animal condition	2	3.7
• unclear traffic signs in the self-drive area (n=1)	Facilities	1	1.85
• products and activities in BWP charged expensive fees (n=3) • extra parking fees charged for self-drive (n=2) • deposit was not refunded after self-drive (n=1) • animal-viewing bus only stopped for few seconds (n=1) • could not bring vegetables from the outside (n=1)	Management	8	14.8
• poor air (n=1)	Environment	1	1.85
• poor staff service and few staff during holidays (n=3) • poor phone signal (n=2) • no map on the ticket (n=1)	Service	6	11.1
• complaints about Qunar app (n=8) • non-relevant (n=1)	Other	9	16.7

RESULTS AND FINDINGS

Text Frequency Analysis

The Appendices show the word frequencies for the cleaned text data. After analysing and comparing Ctrip and Qunar positive comments about BWP (see Appendix A and Appendix B), "worth it" (n=106) was found to occur most, followed by "Nice" (n=103). "Recommend" (n=102) and "experience" (n=101) ranked third and fourth respectively. After comparing the negative comments about BWP on both Ctrip and Qunar (see Appendix A and Appendix B), "animal" (n=79) was found to have the highest word frequency. "Zoo/park/wildlife park" (n=63) ranked second, followed by "does not have" (n=53) and "wait in line" (n=52).

Thematic Analysis of Text

The thematic analysis was in three stages. At the end of the first step, 221 Ctrip positive comments had 221 Chinese free codes, 241 Ctrip negative comments had 241 Chinese free codes, 85 Qunar positive comments had 85 Chinese free codes, and 54 Qunar negative comments had 54 Chinese free codes. After interpretive coding, Ctrip had 21 positive interpretive codes (see Table 1) and 39 negative interpretive codes (see Table 2). Qunar 85 and 54 free codes were reduced to 21 interpretive codes (see Table 3) and 23 interpretive codes (see Table 4) respectively. In the third step, these codes, negative and positive, were categorised to seven overarching themes: "visitor experience," "animal condition," "facilities," "management," "environment," "service," and "other." Table 5 compares and combines the codes in the Ctrip positive comments and those in the Qunar positive comments. Similarly, Table 6 was generated after the codes of Ctrip and Qunar negative comments had been compared and combined.

Table 5: *Combined Positive Comments*

Positive Comments (n=306)			
Codes	**Themes**	**Frequency**	**Percent (%)**
- fun, good view, good experience, recommend (n=128) - children, adults and the elderly had fun (n =37) - good experience in self-drive, small trains, safe animal-viewing bus, and walking route (n=26) - could interact with and feed animals (n=15) - not crowded during non-holidays (n=10) - visited many times (n=6) - not expensive (n=4) - not far from Beijing city (n=1) - good indoor design (n=1)	Visitor experience	228	74.5
a lot of energetic, healthy, and friendly animals (n=5)	Animal condition	5	1.63
- good and big park (n=10) - helpful battery car (n=5) - safe animal-viewing bus (n=5) - big carpark (n=1) - creative entrance and isolation (n=1) - small train (n=1) - good playground for children (n=1) - clean and safe facilities (n=1)	Facilities	25	8.2
- convenient check-in (n=13) - animal-viewing buses arrived on time (n=1) - free ticket policy for children under 1.2 metres (n=1) - good management (n=1)	Management	16	5.22
- fresh air, clean environment, good green plants (n=3) - good view (n=1) - good shade from strong sun (n=1)	Environment	5	1.63

Positive Comments (n=306)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• good staff service (n=9) • good service (n=2) • children's meals provided in the park (n=1)	Service	12	3.92
• non-relevant (n=6) • advice(n=5) • comments on Qunar app (n=4)	Other	15	4.9

Table 6: *Combined Negative Comments*

Negative Comments (n=295)			
Codes	**Themes**	**Frequency**	**Percent (%)**
• poor experience, low-cost performance, poor enjoyability (n=30) • too many people and cars during holidays (n=30) • disappointing self-drive due to traffic jams, unclear traffic signs and too few animals (n=24) • long waiting time for small trains and viewing cars (n=23) • crowded (n=21) • difficult to interact with animals (n=5) • no preferential policy for medical staff during pandemic, nor ticket policy for children and the elderly (n=4) • viewing buses were too quick (n=4) • location too far away (n=4) • the park was small (n=1) • not a wildlife park, just a zoo (n=1) • inadequate scenic spots (n=1) • poor play design (n=1) • too much noise (n=1)	Visitor experience	150	50.8

• not many animals (n=11) • lazy and unhealthy animals (n=5) • animal attacks (n=4) • poor animal shows (n=3) • animals were fed too much during holidays (n=1) • animals in the wildlife area were fenced in ditch (n=1)	Animal condition	25	8.5
• not enough viewing vehicles (n=4) • no bathroom around the parking area (n=1) • automatic check-in machine was not working (n=1) • animal-viewing truck is not electronic, too much noise and pollution(n=1)	Facilities	7	2.4
• expensive entrance ticket, products, and activities, charged expensive fees (n=29) • problems with the management of entrance, exit, small trains, wildlife area and parking; waiting time was too long; people jumping the queue; crowded when boarding (n=11) • self-drive cars required extra expensive parking fees (n=5) • could not bring vegetables from outside (n=4) • eating and shopping mainly required cash (n=1) • could only feed designated animals (n=1) • deposit was not refunded after self-drive (n=1)	Management	52	17.6
• poor air (n=2) • some animal houses had strong odours (n=1) • too much rubbish (n=1)	Environment	4	1.4

• unclear information about cars, activities, and tickets (n=7) • poor staff service (n=4) • no phone signal (n=4) • poor online audio commentary (n=1) • only junk food and not many resting areas (n=1) • no map on the ticket (n=1) • information not updated, such as location and content (n=1)	Service	19	6.4
• complaints about Ctrip app (n=22) • complaints about Qunar app (n=8) • non-relevant (n=8)	Other	38	12.9

DISCUSSION OF THE FINDINGS

Summary

As the service industry faces increasingly fierce competition from market pressures, high-quality service is a major strategy for the survival and development of any enterprise (Sukwadi & Yang, 2014). Service quality is recognised as the main driving force for improving customer satisfaction, and therefore, competitiveness (Chang, 2008). However, as quality is a multi-dimensional composition, managers must be competent in managing the key attributes/characteristics of their service operations (Corrêa et al., 2007). Thus, when evaluating service offerings, understanding which aspects tourists consider most important has become a priority for zoos (Sukwadi & Yang, 2014). This study's analysis of online comments on Ctrip and Qunar regarding BWP provides interpretative codes in numbers and percentiles, showing the main attributes of BWP. Figures 2 and 3 present key attributes of positive and negative online comments in graphical form.
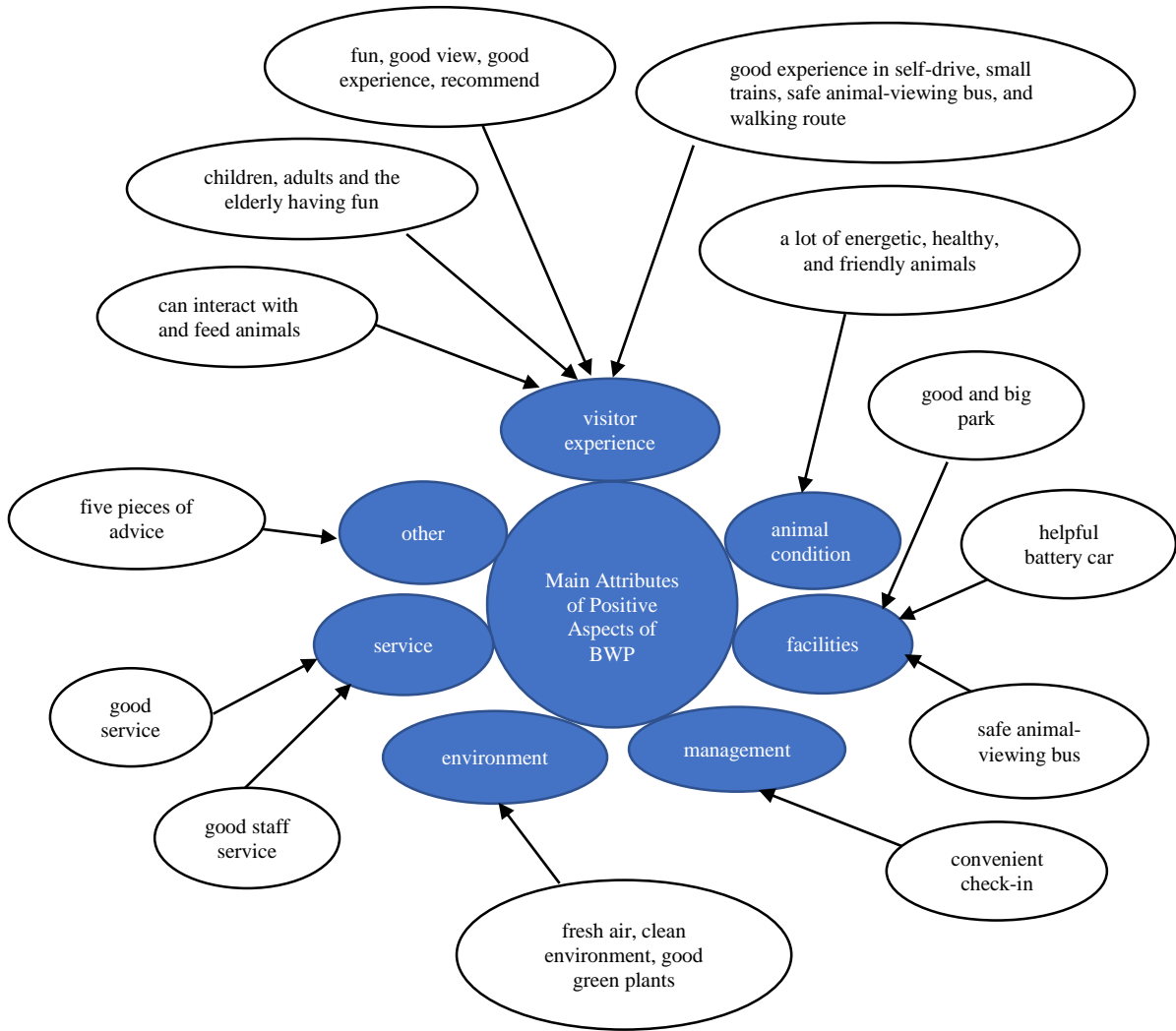
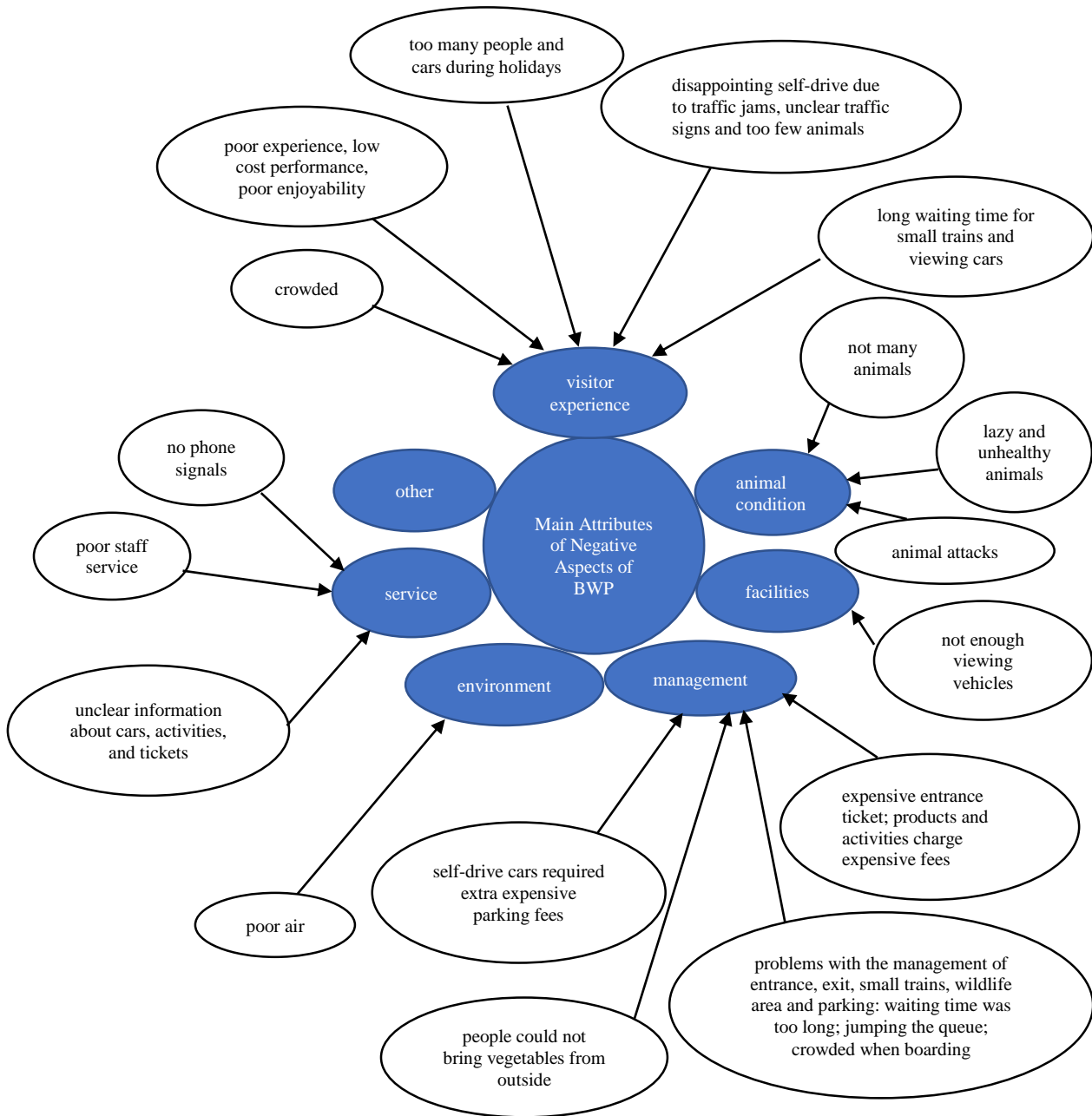**Figure 1**: *Main Attributes of Positive Aspects of BWP*

Figure 2: *Main Attributes of Negative Aspects of BWP*

From the analysis of the positive and negative aspects of BWP through online comments on two Chinese apps, Ctrip and Qunar, seven themes for

positive and negative comments were identified: "visitor experience," "animal condition," "facilities," "management," "environment," "service," and "other." Through these themes, comments relating to strengths and weaknesses of BWP provide information that can contribute to the Park's sustainable development.

Strengths and Limitations

The study has a number of strengths and limitations which need to be recognised. The first is that there may have been comments considered offensive or inappropriate by website administrators that could not be viewed or analysed. Such comments potentially offer legitimate opinions, and their exclusion may have resulted in some bias in the research results (Giles et al., 2015). Secondly, whether the online comments and commenters represented the range of views of the public was considered. Therefore, two of the most popular Chinese travel apps, Ctrip and Qunar, were selected, so some of the most-read comments on this topic were largely captured for analysis. However, this does not necessarily mean that the sample completely represents the general population, so further research is needed.

Thirdly, the data collection method used allowed the collection of a series of spontaneous opinions that are generated when an individual is able to post comments without the demand characteristics of primary data research, and with the added protection of anonymity (Coulson, 2005). This method gave access to honest public perceptions of BWP. However, due to the anonymity of the internet, some commenters may feel they do not need to be honest or polite (Fredheim et al., 2015). There is also a possibility that interested parties paid commenters to make their comments (Thomas-Meyer et al., 2017).

Finally, to operationalise the study, netnography was selected as the research technique because a large number of opinions can be analysed (Kozinets, 2012) with limited resources (Moraes & Michaelidou, 2012), and within a short period of time. As no researchers were present when commenters made their comments, researcher's influence on the results was negligible. Conversely, the lack of researcher interference in the data also meant that commenters' reasoning and meaning could not be probed (Thomas-Meyer et al., 2017). Despite this, the complexity of interpretive codes and the seven themes identified indicates that comments were not superficial.

CONCLUSION

In this netnographic study, involving a thematic analysis of online comments, seven themes were identified in positive and negative comments. These were: "visitor experience," "animal condition," "facilities," "management," "environment," "service," and "other." There were deep contrasts and contradictions in the views expressed, highlighting that a "one size fits all" solution for problems is unlikely to be effective. Tailoring and targeting various different management measures may be the most effective and acceptable in this situation (Cameron & Ritter, 2007). Managers of BWP can make full use of the key attributes of the positive comments to formulate feasible and effective management plans or advertisements. Similarly, knowledge of the key attributes of negative comments could be used to address barriers to achieving the sustainable development of BWP.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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APPENDICES
Appendix A: Ctrip Comments

Ctrip Positive Comments			Ctrip Negative Comments		
Rank	**Word**	**Frequency**	**Rank**	**Word**	**Frequency**
1	值得 (worth it)	106	1	动物 (animal)	79
2	不错 (nice)	103	2	动物园/园区/野生动物园 (zoo/park/wildlife park)	63
3	推荐 (recommend)	102	3	没有 (does not have)	53
4	体验 (experience)	101	4	排队 (wait in line)	52
5	好玩 (fun)	93	5	小时 (hour)	50
6	有趣 (interesting)	90	6	火车 (train)	40
7	景色 (view)	83	7	体验 (experience)	35
8	孩子 (children)	34	8	孩子 (children)	30
9	动物 (animal)	31	9	工作人员 (staff)	21
10	可以 (capable of)	22	10	门票 (ticket)	21
11	野生动物园 (wildlife park) /动物园 (zoo)	21	11	门口 (entrance)	20
12	开心 (happy)	17	12	堵车 (traffic jam)	19
13	猛兽 (wildlife)	12	13	知道 (know)	19
14	喜欢 (like)	11	14	时间 (time)	18
15	感觉 (feel)	9	15	不让 (prohibit)	17
16	排队 (wait in line)	9	16	结果 (in the end)	16
17	火车 (train)	9	17	进去 (enter)	16
18	时间 (time)	8	18	里面 (in the park)	16
19	地方 (location)	8	19	猛兽 (wildlife)	16
20	方便 (convenient)	8	20	建议 (advice)	16
21	小时 (hour)	7	21	根本 (not at all)	16
22	游览 (tour)	5	22	不好 (bad)	16
23	互动 (interact)	5	23	特别 (especially)	15
24	老虎 (tiger)	5			

Appendix B: Qunar Comments

Qunar Positive Comments			Qunar Negative Comments		
Rank	**Word**	**Frequency**	**Rank**	**Word**	**Frequency**
1	动物园 (zoo) /野生动物园 (wildlife park) / 园区(park)	34	1	没有 (does not have)	14
2	火车 (train)	26	2	动物 (animal)	13
3	不错 (nice)	20	3	动物园 (zoo) / 野生动物园 (wildlife park)	17
4	孩子 (children)	18	4	排队 (wait in line)	8
5	方便 (convenient)	17	5	孩子 (children)	8
6	动物 (animal)	16	6	不是 (not)	7
7	猛兽 (wildlife)	12	7	火车 (train)	7
8	开心 (happy)	11	8	建议 (advise)	6
9	排队 (wait in line)	10	9	门票 (ticket)	5
10	体验 (experience)	9	10	服务 (service)	5
11	值得 (worth it)	9	11	猛兽 (wildlife)	5
12	地方 (location)	8	12	不如 (not as good as)	4
13	建议 (advise)	8	13	联系 (contact)	4
14	感觉 (feel)	8	14	不能 (cannot)	4
15	便宜 (cheap)	8	15	回来 (come back)	4
16	喜欢 (like)	8	16	一直 (all the time)	4
17	看到 (saw)	7	17	导游 (tourist guide)	3
18	工作人员 (staff)	7			
19	北京 (Beijing)	7			