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A quantitative investigation of tourists' ethical attitudes toward animal-based attractions

Abstract

Despite the considerable incorporation of animals in entertainment and leisure venues, only limited efforts have been geared towards exploring the ethical aspects of using animals in these initiatives. This lack of attention is especially evident in the tourism literature, despite the great relevancy of animal-based attractions to the tourism industry. Consequently, the purpose of the current research was to fill the gap in the literature by investigating tourists' attitudes toward various animal-based attractions, using survey that was administered to tourists in the Central Florida area. The central findings of the study concerned the prominent aspects of tourists' ethical evaluation of animal-based attractions. The tourists expressed the highest agreement with the roles of the attractions in conservation, in family-oriented experience, in education, and as an alternative to nature. They also expressed a clear animal welfare approach, as they put the greatest importance on the way the animals are treated and trained by their keepers among conditions for ethical operations. Nevertheless, it was found that the key to developing positive attitudes toward attractions is the conviction in general arguments in favor of their presence, while specific sites' attributes seem to be more limited in their influence on the tourists' overall attitudes. Overall the study revealed some interesting findings with important implications for both research and practice, including specific recommendations for the management and marketing functions in animal-based attractions, especially with regard to potential steps for the purpose of improving and enhancing their ethical image among tourists.

Key words: animal-based attractions; zoos; tourists' attitudes; ethics; Central Florida, USA

Introduction and background

The intention of the study was to investigate tourists' attitudes toward a variety of animal-based attractions. Holding collections of exotic wildlife in captive settings for various purposes has ancient roots, as primeval rulers kept large menageries of animals as a sign of their strength and prowess, also occasionally demonstrated by slaughtering entire collections (Jamieson, 2006). The exhibition of wildlife in zoological gardens for the general public, for recreational, educational, or other reasons, began only later, in the eighteenth and nineteenth centuries, when the first modern zoos were established in Europe (Bostock, 1993). In this day and age, watching wildlife in captive settings (called here animal-based attractions) is one of the most popular leisure activities worldwide (Tribe & Booth, 2003), with significant implications for the travel and tourism industry. Although most visitors to animal-based attractions are still local residents, many of these sites are now marketing themselves as wildlife tourism destinations

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that attract domestic and international tourists (Tribe, 2004). Furthermore, it has been shown that an offering of encounters with wildlife (also in captive settings) as part of an itinerary is likely to increase the likelihood that potential travelers will select a certain travel package (Stone, Tucker & Dornan, 2007). Consequently, investigating tourists' attitudes and behavior toward animal-based attractions is of great relevance to the tourism industry, with both theoretical and behavioral implications.

It has been argued that animal-based attractions became popular after they turned to be, for most people, the only venue for observing and interacting with wildlife (Beardsworth & Bryman, 2001; Turley, 2001). Nevertheless, it would be wrong to assume that animal-based attractions constitute only or even mainly of zoos. The range of captive-based sites is very broad, as they constitute "a series of visitor attractions based around animals kept in some kind of captivity, ranging from conventional zoos to open-air safari parks" (Shackley, 1996, p. 96), each with its own distinctive nature and characteristics. That being the case, while most previous related studies focused mainly on zoos as representative of captive-based sites (see, for example, Mason, 2007), the current empirical study investigates several distinct animal-based attractions that represent the wide variety of such sites, including zoos, aquariums, circuses, safari parks, animal theme parks, animal racing venues, rodeos, and bullfights. It is argued that considering the unique nature and meaning of various animal-based attractions, rather than relating to them as a type of homogenous attraction, is vital for developing a thorough understanding of human-animal interactions in captive settings, and adds relevance to the current study.

Despite their popularity, animal-based attractions have been a persistent target of criticism and condemnation by animal rights and welfare advocates, both academicians and activists. Even though using animals for entertainment has never been seen as a high priority for the animal rights movement, especially compared with the controversial handling of animals in factory farms and scientific laboratories (Singer, 1975), a range of arguments has been raised against the common practice of keeping wildlife in captive-based public displays and exhibits. Examples of such arguments include the poor captive conditions in many attractions around the world, disruption of family groups and other sophisticated social structures during capture and transport, and inhumane training methods for animal shows.

More generally, it has been claimed by these advocates, that animal-based attractions are characterized by tastelessness and vulgarity, as the sites are intended for "the exercise of naked power over animals, and as a location for the indulgence of an unashamedly recreational gaze upon its captive inmates" (Beardsworth & Bryman, 2001, p. 89). Advocates of animal rights or animal liberation philosophies (e.g., Jamieson, 2006) are likely to utterly reject the use of animals in attractions, regardless of the welfare of the exhibited animals, since removing wildlife from their natural environment and putting them in captivity is perceived as a violation of the animals' right to equal consideration of their interests (which include, for example, wide space to roam) or as a denial of the animals' inherent value. For instance, Regan (1995) argued that providing "more space and a few companions won't eliminate—won't even touch—the basic wrong that attaches to our viewing and treating these animals as our resources" (p. 13).

On the other hand, advocates of animal-based attractions have raised a series of arguments aiming to justify the existence of these sites. Most of these arguments revolve around the allegedly positive roles of animal-based attractions in entertainment and recreation, education, scientific research, and wildlife conservation (e.g., Fraser, Gruber & Condon, 2007; Mason, 2000). Yet the ethical debate over animal-based attractions is far from resolved, when counterarguments for and against their existence

are constantly raised on both sides of the barricade (see Table 1 for a comprehensive review of these arguments). It should also be noted that the nature of animal-based attractions is not static; they are constantly evolving, with evident improvements as a result of animal welfare concerns, especially through upgrading of husbandry practices and the incorporation of environmental and behavioral enrichments (see Shani & Pizam, 2008, 2010).

Table 1
Arguments in favor of and against animal-based attractions

In favor of animal-based attractions	Against animal-based attractions
Animal-based attractions play important entertainment and recreation roles, especially for families with children.	The dignity and the welfare of the exhibited animals in attractions are severely damaged in captive conditions.
People can see various - sometimes rare - animals, which otherwise they would not be able to see.	Modern means such as nature films, TV programs and magazines offer a reasonable substitute for animal-based attractions.
Visitors can enrich their knowledge about wildlife and witness animal behavior, by themselves.	Visitors get only twisted and false conceptions of wildlife and the animals' natural behavior.
The research conducted in animal-based attractions contributes to the human understanding of different species, which both wild and captive animals benefit from.	If there were no animal-based attractions, there would be no need to improve their life. Regarding wildlife, the best policy is to just "let them be".
Many endangered species would have been extinct without conservation and breeding programs in animal-based attractions.	Conservation goals do not justify the damage caused to individual animals by confining them. In addition, since captive animals do not preserve their natural characteristics, this makes preservation efforts mush less valuable.
Mass tourists see animals in animal-based attractions, which are controlled and supervised environment, instead of risking themselves in the wild and/or disrupting the fauna and flora in its natural habitat.	The animals exhibited pay a heavy physiological and psychological price for living in such unnatural and confined environments.

Source: Shani & Pizam (2008, 2009, 2010).

This debate, however, was derived mainly from the general literature on animal ethics, as well as from the disciplines of applied animal behavior and zoo biology, rather than from the tourism literature. One of the main reasons for the relative neglect of the issue by tourism researchers might be the prevalent perception of zoos and other animal attractions as sites designated for local residents, rather than as tourist attractions, an assumption that, as discussed above, is incorrect in many cases or at least inaccurate, especially in light of the highly popular contemporary mega zoos and animal theme parks that attract millions of visitors annually (Lück & Jiang, 2007). In a special issue of *Tourism International Review* dedicated to zoos, aquaria, and tourism, guest editors Frost and Roehl (2007) concluded that "the unfortunate situation is that there are probably less than a dozen research studies of zoos and aquaria in the academic tourism literature" (p. 191).

This lack of attention in the academic tourism literature can at least partially explain why so little is still known about the attitudes of tourists themselves towards the issues being disputed, as noted by various scholars (e.g., Jiang, Lück & Parsons, 2007). As a discipline that relies heavily on marketing concepts and is considered in the forefront of the service sectors, tourism studies can significantly contribute to the revealing and integration of tourists' views on the current discussion of animal-based

attractions, with consequent insights and implications for both site management and animal welfare and rights organizations. In the current situation, tourists' attitudes and views towards animal-based attractions, including the influential factors in these attitudes, are still not fully understood and are based mostly on investigations conducted at specific sites (e.g., Mason, 2007; Moscardo, 2007). This case study approach, while providing valuable insights, prevents a comprehensive picture of tourists' views and opinions on animal-based attractions from emerging. Therefore, it was the intent of the current study to examine generic tourists' ethical attitudes toward animal-based attractions, independent of a specific site or location.

Theoretical framework

The theoretical framework of this study is based on preliminary exploratory qualitative research, conducted by Shani and Pizam (2009), as well as other previous studies focusing on tourists' perceptions of animal-based tourist attractions (e.g., Benkenstein, Yavas & Forberger, 2003; Hughes, Newsome & Macbeth, 2005; Mason, 2000; Ryan & Saward, 2004; Turley, 1999, 2001). In short, Shani and Pizam (2009) found that tourists' attitudes toward animal-based attractions are affected by three aspects of evaluation: (1) agreement or disagreement with general justifications for the existence of animal-based tourist attractions; (2) the extent of belief in driving forces responsible for ethical use of animals in tourist attractions; and (3) the perceived importance of specific conditions for the ethical operation of animal-based attractions (see Table 2). The results of the preliminary study, as well as previous studies, assisted in the construction of the conceptual framework for the current study and in the development of the instrument for the main quantitative investigation.

Table 2
Key themes in ethical evaluation of animal-based attractions

Themes	Meaning	Features
General justifications for having animal-based attractions	The ideological basis for justifying/rejecting the use of animals on entertainment ventures	 Conservation Education Scientific research Alternative to nature Benefits to individual animals Regulation of wildlife
Belief in driving forces for ethical animal-based attractions	The belief that that modern animal-based attractions are fundamentally different from similar past attractions	Public opinion Legal system and institutional supervision
Conditions for ethical operations of animal-based attractions	The ethical evaluation of the conditions in each specific animal-based attraction	 Natural environment Natural behavior Training methods Visitors' behavior Fairness Safety

In detail, the research model suggests that tourists' ethical evaluation of animal-based attractions comprises three main factors. First, ethical attitudes toward animal-based attractions are based on general arguments in favor of (or against) their existence. These arguments do not point toward a specific attraction, but rather serve as an ideological basis for justifying (or rejecting) the use of animals in entertainment venues in general (e.g., the role of animal-based attractions in conservation, scientific research, and education). The second factor in the ethical perception of animal-based attractions includes driving forces believed to cause the attractions to treat the animals responsibly. The belief that contemporary animal-based attractions are considerably more ethical than in the past derives from two factors: the power of the media and public opinion—which is perceived to have a major impact on the operation of the attractions—and the legal and enforcement system, which is trusted to supervise their operations. Finally, the last factor is linked to the tourists' judgment of each specific animal-based attraction, and includes conditions needed to be fulfilled in order for an attraction to be considered ethical. Examples of such conditions include natural design of the animal displays, natural behavior of the animals, and gentle training methods.

Although the model depicts the factors influencing tourists' attitudes toward animal-based attractions, their relative importance to tourists are still unclear. Understanding whether certain factors are more dominant than others in the ethical judgment of animal-based attractions is important information for the management of such attractions, especially in their marketing and operation efforts. Such data can be useful to other stakeholders of animal-based attractions, such as animal activists and environmental organizations. Specifically, the study will be guided by the following questions:

- 1. What are the prominent aspects of ethical evaluation of animal-based attractions?
- 2. What factors contribute to tourists' attitudes toward animal-based tourist attractions, and what is their relative importance?

Methodology

Survey instrument and measures

To address the research questions that derive from the study model, the current study utilizes four sections from a survey instrument used in a large-scale research project. The first two sections focus on examining the respondents' ethical perceptions of animal-based attractions. The items used to measure the perception of the respondents represent the three themes described earlier. Given the exploratory nature of the current study, the items in these sections were mostly developed based on the findings of the focus groups sessions, conducted in the previous research stage (Shani & Pizam, 2009). Nevertheless, there was attempt to use instrument items from previous studies when they addressed similar concepts (e.g., Berkenstein, Yavas & Forberger, 2003; Ryan & Saward, 2004; Turley, 2001). The third section of the questionnaire used in this study examines the respondents' attitudes toward specific animal-based attractions. Following the recommendations of Well and Hepper (1997), respondents were asked to indicate to what extent they find the aforementioned different types of animal-based attractions morally acceptable. Finally, the questionnaire ends with questions regarding the respondents' profile, which includes a variety of personal background variables.

Reliability and validity assessments

The measurement instrument was tested for validity and reliability. To assess the instrument's face validity and its content validity the study applied three steps, as recommended by Khan (2003). The scale items was piloted by selected faculty (step 1), students (step 2), and tourists (step 3), in order to examine appropriateness of the wording of the instrument and the clarity of its layout, as well as the degree of comprehensibility of its content. The respondents in this pilot stage were encouraged to report on any difficulties in understanding the survey and whether any facets of the topic under investigation were not covered in the questionnaire. Based on the feedback that was provided, necessary minor changes were made after each step, before the instrument was finalized and administered to the main study's sample.

Further steps were taken after the data collection phase to assess the reliability of the instrument. Since the participants' ethical evaluation of animal-based attractions was measured through three constructs, a Cronbach's alpha was used to determine the reliability of each construct. Overall, respondent rating of each of the three structures can be judged to be very good for the tourists to whom it was given, with reliability coefficient of 0.945 for the justification of having animal-based attraction, 0.844 for the driving forces for having ethical animal-based attractions, and 0.980 for the conditions for ethical operation of animal-based attractions.

The next step to be taken is the appraisal of the construct validity of the instrument. Although construct validity is often established by correlating the measure with other measures which are supposed to examine a similar constructs, the uniqueness of the current instrument and the lack of related measures does not enable the typical assessment. In such a case, the study followed the procedure adopted by Enright and Newton (2004), in which the validity is examined by calculating Cronbach's alpha for each of the constructs' dimensions following the removal of each item sequentially from the dataset. In the case Cronbach's alpha for the constructs' resulting sets remain consistently at satisfactory values, it can be concluded that all the items in each dimension contribute to the value of Cronbach's alpha and hence, that the construct validity can be considered acceptable.

Overall, the Cronbach's alpha of all the dimensions can be judged to be fairly acceptable or very good. While in the cases of the dimensions "conservation" and "benefits to individual animals", and "legal system and institutional supervision", it was possible to slightly increase the reliability by eliminating one of the item, it was decided not to do so since they were deemed to be important and the dimensions' alpha values were at satisfactory levels in any case. In order to assess the convergent validity of dimensions that include only two items, the study followed the suggestion of Green, Salkind, Neil and Akey (1997), to correlate each item with its own factor (theme) – with the item removed. All the item-total correlations were above 0.439, which is considered fairly and above satisfactory score.

Sampling

Data for this study was collected using an intercept survey among visitors to Central Florida - a distinguished tourism destination, characterized by icon animal-based attractions, such Animal Kingdom, SeaWorld, Busch Gardens, Discovery Cove, Gatorland, as well as numerous dinner shows featuring animals. The targeted participants in the study were tourists visiting Central Florida, who were recruited

from five hotels at the destination. For the purpose of the survey, a tourist is defined as a person who stays at hotel, regardless of the distance traveled. The guests in the hotels were approached according to the principle of judgmental (also known as purposive) sampling, according to which the representativeness of the sample is based on the evaluation of the researcher. Attempts were made to ensure heterogeneity among the respondents (in terms of gender, age, ethnicity, origin, and country of origin), albeit without applying probability sampling techniques. The sample included both visitors and nonvisitors of animal-based attractions, in order to grasp the wide variety of ethical perspectives on the subject matters. Overall a sample size of 267 tourists was obtained, representing approximately 35% response rate. Fifteen questionnaires were found to be unusable, and were therefore excluded from the study, leaving a sample of 252 participants, which allowed us to conduct suitable statistical analyses.

Findings

Study participants' profile

Out of the 252 usable surveys, 56.2% of the participants were females and 43.8% were males. Slightly over 50% were married, 40.6% were singles, and the rest (8.8%) were classified as "other". The mean age of the participants was 42.29; 57.5% were 44 or younger and 42.2% were 45 or older. Most of the respondents (59.4%) had children (mean=1.5), yet only 30.5% had children under the age of 18 (mean=0.6). Slightly more than half of the respondents (50.6%) had some sort of a higher education degree, and 46.9% reported an annual income of more than \$40,000. The vast majority of the sample was Caucasian (83.7%), and 66.9% were domestic U.S. visitors, while the rest, 33.1%, were international tourists mainly from Britain, Canada, Ireland, and Brazil.

Ethical evaluation of animal-based attractions

First, the perceived importance of the general justifications for having animal-based attraction was examined (see Table 3). As can be seen, the perceived role of attractions in wildlife conservation received the highest mean among the justifications, followed by family-oriented experience, education, and alternative to nature. Lower importance was attributed to the role of the attractions in scientific research, entertainment, benefits to individual animals, and finally regulation of wildlife. Overall it is possible to conclude that the role of animal-based attractions as family-oriented recreation centers was recognized by the participants as a prominent justification for having animal-based attractions, while their role in entertainment was lower in importance in comparison to issues such as conservation, education, and even scientific research.

Table 3

Justifications for having animal-based attractions

Dimensions and items	Strongly disagree 1	Dis- agree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5	Mean (SD)	N
Conservation						3.98 (0.79)	245
Animal attractions play an important role in preserving endangered species	3.2% (n=8)	4.8% (n=12)	13.1% (n=33)	38.6% (n=97)	40.2% (n=101)	4.06 (1.00)	251
Animal attractions allow people to see wildlife without destroying their natural habitat	1.2% (n=3)	7.2% (n=18)	10.4% (n=26)	30.5% (n=76)	50.6% (n=126)	4.02 (0.90)	249
Animal attractions are important places for conserving wildlife	2.8% (n=7)	5.2% (n=13)	16.9% (n=42)	33.7% (n=84)	41.4% (n=103)	3.98 (0.99)	249
We must support animal attractions so they can develop breeding programs	3.6% (n=9)	7.9% (n=20)	20.6% (n=52)	25.8% (n=65)	42.1% (n=106)	3.79 (1.03)	252
Family-oriented experience						3.92 (0.86)	251
Animal attractions are important places for adults to share something with children	2.8% (n=7)	4.0% (n=10)	11.1% (n=28)	31.3% (n=79)	50.8% (n=128)	4.04 (0.91)	252
Animal attractions play an important recreational role for families	2.4% (n=6)	7.2% (n=18)	19.9% (n=50)	22.3% (n=56)	48.2% (n=121)	3.81 (0.94)	251
Education						3.87 (0.78)	246
Animal attractions are important educational sites for children	2.8% (n=7)	4.0% (n=10)	11.1% (n=28)	31.3% (n=79)	50.8% (n=128)	4.04 (0.91)	252
Animal attractions are important sites to learn about animals	2.8% (n=7)	5.2% (n=13)	7.6% (n=19)	28.7% (n=72)	55.8% (n=140)	4.02 (0.91)	251
Animal attractions promote environmental awareness	2.8% (n=7)	5.2% (n=13)	16.9% (n=42)	33.7% (n=84)	41.4% (n=103)	3.98 (0.99)	249
Using animals in tourist attractions is beneficial for educational purposes	3.2% (n=8)	8.4% (n=21)	17.2% (n=43)	22.4% (n=56)	48.8% (n=122)	3.79 (0.99)	250
Animal attractions demonstrate how to treat animals responsibly	3.6% (n=9)	8.0% (n=20)	20.7% (n=52)	25.5% (n=64)	42.2% (n=106)	3.78 (1.03)	251
Animal attraction contribute to "softening" the negative image of certain animals and making them less intimidating	3.2% (n=8)	8.4% (n=21)	17.6% (n=44)	30.0% (n=75)	40.8% (n=102)	3.61 (0.98)	250

Table 3 Continued

Dimensions and items	Strongly	Dis-	Neither agree nor		Strongly	Mean	N
Difficultions and items	disagree 1	agree 2	disagree 3	Agree 4	agree 5	(SD)	.,
Alternative to nature						3.86 (0.80)	248
Without animal attractions many people would not have the opportunity to see wildlife	4.4% (n=11)	5.6% (n=14)	6.4% (n=16)	32.3% (n=81)	51.4% (n=129)	4.02 (1.00)	251
Animal attractions are a safe and secure alternative to seeing wildlife in their natural habitat	2.4% (n=6)	4.4% (n=11)	17.9% (n=45)	21.9% (n=55)	53.4% (n=134)	3.88 (0.88)	251
Animal attractions are an affordable and inexpensive alternative to seeing wildlife in their natural habitat	3.6% (n=9)	8.4% (n=21)	18.4% (n=46)	22.0% (n=55)	47.6% (n=119)	3.69 (0.98)	250
Scientific research						3.42 (0.99)	247
The research conducted in animal attractions is vital in order to save species from becoming extinct	6.8% (n=17)	10.4% (n=26)	22.9% (n=57)	23.7% (n=59)	36.1% (n=90)	3.58 (1.15)	249
Animal attractions play an important role in scientific research	6.4% (n=16)	9.2% (n=23)	17.5% (n=44)	31.9% (n=80)	35.1% (n=88)	3.48 (1.08)	251
Conducting research in animal attractions is sometimes the only way scientists can learn about wildlife	10.8% (n=27)	14.4% (n=36)	18.4% (n=46)	26.8% (n=67)	29.6% (n=74)	3.18 (1.21)	250
Entertainment						3.41 (0.92)	243
Animal attractions play an important role in entertaining visitors	5.7% (n=14)	12.1% (n=30)	15.4% (n=38)	23.9% (n=59)	42.9% (n=106)	3.50 (1.07)	247
Animal attractions are places where visitors can see animals entertaining them	6.9% (n=17)	12.5% (n=31)	16.1% (n=400	28.6% (n=71)	35.9% (n=89)	3.31 (1.10)	248
Benefits to individual animals						3.03 (1.06)	249
Animal attractions provide a safe and secure environment for wildlife	6.8% (n=17)	10.0% (n=25)	15.1% (n=38)	30.7% (n=77)	37.5% (n=94)	3.44 (1.08)	251
Animals in attractions are better off than animals in the wild, since they are free from predators	11.2% (n=28)	14.8% (n=37)	20.0% (n=50)	25.6% (n=64)	28.4% (n=71)	2.84 (1.23)	250
Animal in attractions are better off than animals in the wild, since they have no food concerns	12.4% (n=31)	15.2% (n=38)	18.0% (n=45)	26.0% (n=65)	28.4% (n=71)	2.78 (1.26)	250
Regulations of wildlife						3.01 (1.22)	251
Keeping animals in attractions is an important way to regulate and supervise the natural environment and the wildlife	11.6% (n=29)	13.9% (n=35)	19.9% (n=50)	25.5% (n=64)	29.1% (n=73)	3.01 (1.22)	251

The perceived importance of the conditions for ethical operation of animal-based attractions is presented in Table 4. Overall, all the conditions received relatively high scores, with the highest one being the treatment of animals, followed by zoo keepers' background and behavior, training methods, and visitors' behavior. Lower but still fairly high scores were ascribed also to natural environment, natural behavior of animals, and safety. The attributes that were given the lowest importance were the displayed animals' origin and the concept of fairness. Again, it should be noted that all the scores for this section were exceptionally high.

Table 4
Conditions for ethical operations of animal-based attractions

Conditions for ethical ope							
Dimensions and items	Very unimport- ant 1	Un- important 2	Neither important nor unimportant	Important 4	Very important 5	Mean (SD)	N
Treatment of animals						4.57 (1.04)	252
That the exhibited animals receive sufficient food and medical care	6.7% (n=17)	0.4% (n=1)	0.0% (n=0)	14.7% (n=37)	78.2% (n=197)	4.57 (1.04)	252
Zoo keepers' back- ground and behavior						4.50 (1.05)	252
That the zoo keepers are educated and are sensitive to the animals	6.7% (n=17)	0.4% (n=1)	0.8% (n=2)	20.6% (n=52)	71.4% (n=180)	4.50 (1.05)	252
Training methods						4.39 (1.04)	252
That animals are not abused during training	8.3% (n=21)	0.4 (n=1)	1.6% (n=4)	15.9% (n=40)	73.8% (n=186)	4.46 (1.14)	252
That animals are trained gently	6.0% (n=15)	1.2% (n=3)	6.3% (n=16)	27.4% (n=69)	59.1% (n=149)	4.33 (1.07)	252
Visitors' behavior						4.39 (1.04)	252
That the visitors to the at- traction display respect- ful behavior towards the animals	6.7% (n=17)	0.4% (n=1)	1.6% (n=4)	25.0% (n=63)	66.3% (n=167)	4.44 (1.06)	251
That there is supervision of the visitors' behavior toward the animals in the attractions	6.7% (n=17)	1.2% (n=3)	3.2% (n=8)	29.4% (n=74)	59.5% (n=150)	4.34 (1.08)	252

Table 4 Continued

Dimensions and items	Very unimport- ant 1	Un- important 2	Neither important nor unimportant 3	Important 4	Very important 5	Mean (SD)	N
Natural environment						4.34 (1.02)	249
That the animal enclosures are of a 'good size'	6.4% (n=16)	0.8% (n=2)	2.4% (n=6)	23.5% (n=59)	66.9% (n=168)	4.44 (1.05)	252
That animal enclosures replicate native habitats	6.3% (n=16)	0.8% (n=2)	3.2% (n=8)	29.0% (n=73)	60.7% (n=153)	4.37 (1.05)	252
That animals are kept in their natural environment/habitat	6.0% (n=15)	2.4% (n=6)	7.6% (n=19)	28.8% (n=72)	55.2% (n=138)	4.25 (1.10)	250
Natural behavior of animals						4.22 (1.01)	246
That animals are 'doing natural things'	6.0% (n=15)	1.6% (n=4)	8.4% (n=21)	29.9% (n=75)	54.2% (n=136)	4.25 (1.08)	251
That the animals express natural behavior	6.0% (n=15)	1.2% (n=3)	8.4% (n=21)	32.3% (n=81)	52.2% (n=131)	4.24 (1.07)	251
That the animal enclosures contain stimulating materials	6.9% (n=17)	2.0% (n=5)	10.1% (n=25)	29.8% (n=74)	51.2% (n=127)	4.17 (1.14)	248
Safety						4.21 (1.11)	249
That the animal shows and exhibits do not constitute any risk for the audience	7.2% (n=18)	2.8% (n=7)	6.4% (n=16)	23.9% (n=60)	59.8% (n=150)	4.26 (1.16)	251
That the animal shows and exhibits do not constitute any risk for staff/performers	7.2% (n=18)	2.4% (n=6)	8.4% (n=21)	30.4% (n=76)	51.6% (n=129)	4.17 (1.15)	250
Displayed animals' origin						4.04 (1.18)	252
That the attraction displays rescued wildlife, rather than animals that were simply captured in the wild	6.3% (n=16)	4.4% (n=11)	15.5% (n=39)	26.2% (n=66)	47.6% (n=120)	4.04 (1.18)	252
The concept of fairness						3.91 (1.25)	250
That the animals receive a 'fair chance' in sport or contest situations	8.0% (n=20)	6.0% (n=15)	16.8% (n=42)	25.2% (n=63)	44.0% (n=110)	3.91 (1.25)	250

The scores of the belief regarding driving forces for ethical animal-based attractions were investigated as well, and the results are shown in Table 5. As can be seen, both dimensions, public opinion and legal system and institutional supervision, receive very similar means; thus, it is possible to conclude that on average, the tourists attributed them similar magnitude as driving forces for ethical operations.

Table 5

Driving forces for ethical operation of animal-based attractions

Dimensions and items	Strongly disagree 1	Dis- agree 2	Neither agree nor dis- agree 3	Agree 4	Strongly agree 5	Mean (SD)	N
Public opinion						3.72 (0.75)	250
Increasing public awareness regarding ani- mal welfare made animal attractions more sensitive in their treatment of animals	2.0% (n=5)	3.2% (n=8)	15.6% (n=39)	20.0% (n=50)	59.2% (n=148)	3.92 (0.81)	250
The concern of negative public relations has made animal attractions more sensitive in their treatment of animals	2.0% (n=5)	5.2% (n=13)	17.6% (n=44)	25.6% (n=64)	49.6% (n=124)	3.76 (0.87)	250
Animal attractions have an interest in being more sensitive in their treatment of animals because it is good for business	4.8% (n=12)	13.6% (n=34)	14.0% (n=35)	24.0% (n=60)	43.6% (n=109)	3.48 (1.05)	250
Legal system and institutional supervision						3.71 (0.78)	249
Animal rights organizations have led to improvements in the welfare of animals in attractions	4.0% (n=10)	4.4% (n=11)	17.6% (n=44)	26.0% (n=65)	48.0% (n=120)	3.87 (0.99)	250
Today there are much more regulations to ensure the welfare of animals in attractions	1.6% (n=4)	5.6% (n=14)	16.0% (n=40)	28.8% (n=72)	48.0% (n=120)	3.71 (0.86)	250
Today there is much more governmental control over the way animals are treated in attractions	2.4% (n=6)	7.6% (n=19)	15.2% (n=38)	36.8% (n=92)	38.0% (n=95)	3.56 (0.92)	250

Attitudes toward animal-based attractions

As can be seen in Table 6, overall the most ethically acceptable attraction among the participants was safari or wildlife park, followed by aquarium, zoo, and animal theme park. More than half of the participants also indicated that aquariums, zoos, and animal theme parks are either acceptable or totally acceptable (87.9%, 89.1%, 85.2%, and 69.8%, respectively). On the other hand, the least acceptable attraction was bullfighting, followed by animal racing, rodeo, and animal circus. More than 40% of the participants indicated that bullfighting, animal racing, rodeo, are either unacceptable or totally unacceptable (79.6%, 51.6%, 48.4%, and 43.2%, respectively).

Table 6
Participants' ethical attitudes toward animal-based attractions

	Totally un- acceptable 1	Un- acceptable 2	Neither acceptable nor un- acceptable 3	Acceptable 4	Totally acceptable 5	Mean (SD)
Safari or wildlife park	1.6%	1.6%	8.9%	55.6%	32.3%	4.15
	(n=4)	(n=4)	(n=22)	(n=138)	(n=80)	(0.78)
Aquarium	1.6%	2.8%	6.5%	59.3%	29.8%	4.13
	(n=4)	(n=7)	(n=16)	(n=147)	(n=74)	(0.78)
Zoo	2.0%	4.0%	8.8%	59.6%	25.6%	4.03
	(n=5)	(n=10)	(n=22)	(n=149)	(n=64)	(0.83)
Animal theme park	5.2%	4.8%	20.2%	50.4%	19.4%	3.74
	(n=13)	(n=12)	(n=50)	(n=125)	(n=48)	(1.00)
Animal circus	17.2%	26.0%	24.0%	25.6%	7.2%	2.80
	(n=43)	(n=65)	(n=60)	(n=64)	(n=18)	(1.21)
Rodeo	23.6%	24.8%	25.2%	21.6%	4.8%	2.59
	(n=59)	(n=62)	(n=63)	(n=54)	(n=12)	(1.20)
Animal racing	26.0%	25.6%	22.8%	21.2%	4.4%	2.52
	(n=65)	(n=64)	(n=57)	(n=53)	(n=11)	(1.21)
Bullfighting	47.6%	32.0%	11.6%	6.0%	2.8%	1.84
	(n=119)	(n=80)	(n=29)	(n=15)	(n=7)	(1.03)

To investigate the association between ethical evaluation and attitudes toward the various animal-based attractions, Pearson correlation coefficients were computed (see Table 7). Attitudes toward zoos, aquariums, animal circuses, safaris and wildlife parks, and animal theme parks were statistically significant and positively associated with each of the justifications for having animal-based attractions. Next, Pearson correlation coefficients were computed to examine the relationship between belief regarding driving forces for ethical operation of animal-based attractions and attitudes toward animal-based attractions. As can be seen in Table 7, within this dimension, public opinion had the highest statistically significant correlations with attitudes toward zoos, aquariums, animal circuses, safaris or wildlife parks, and animal theme parks; all in the positive direction. The belief in the legal system and institutional supervision as a driving force was also positively significantly associated (yet to a lesser degree than public opinion) with attitudes toward aquariums, and safaris or wildlife parks.

With regard to the conditions for having ethical animal-based attractions, the most marked significant correlation was between safety and attitudes toward aquariums. Attitudes toward aquariums were significantly related with few other conditions, but in relatively low correlations. Attitudes toward zoos and animal theme parks were only significantly correlated with safety. Attitude toward safaris or wildlife parks was also correlated with safety, and with natural behavior of animals. Finally, a weak

but significant negative correlation was found between attitudes toward bullfighting and the perceived importance of fairness as a condition for ethical operation.

Table 7
Pearson correlations between ethical evaluation of and attitudes towards animal-based attractions

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	Zoo	Aqua- rium	Animal circus	Safari or wild- life park	Animal theme park	Animal racing	Bull- fighting	Rodeo
Justifications for having animal-based attractions								
Entertainment	0.285**	0.228**	0.413**	0.170**	0.380**	0.152**	0.206**	0.281**
Family-oriented experience	0.252**	0.226**	0.241**	0.224**	0.208**	-0.070	0.002	0.128*
Conservation	0.222**	0.197**	0.108*	0.336**	0.221**	-0.069	-0.045	-0.032
Education	0.323**	0.257**	0.164**	0.314**	0.280**	-0.125*	-0.034	0.056
Scientific research	0.225**	0.240**	0.218**	0.256**	0.222**	0.022	0.083	0.106
Alternative to nature	0.331**	0.296**	0.250**	0.235**	0.309**	-0.105	0.015	0.094
Benefits to individual animals	0.287**	0.193**	0.228**	0.222**	0.201**	-0.071	0.038	0.016
Regulations of wildlife	0.264**	0.240**	0.224**	0.195**	0.259**	-0.010	0.053	0.043
Driving forces for ethical animal-based attractions								
Public opinion	0.224**	0.214**	0.182**	0.244**	0.234**	0.026	-0.013	0.069
Legal system and institutional supervision	0.116	0.130*	0.095	0.188**	0.090	-0.072	-0.068	-0.028
Conditions for ethical operation of animal-based attractions								
Natural behavior of animals	0.017	0.141*	-0.047	0.146*	0.044	-0.067	-0.069	0.016
Natural environment	0.045	0.149*	-0.059	0.100	-0.006	-0.084	-0.102	-0.031
Training methods	0.066	0.165**	-0.054	0.097	0.016	-0.095	-0.081	0.001
The concept of fairness	-0.013	0.083	-0.021	0.105	-0.012	-0.078	-0.132*	-0.043
Safety	0.160*	0.211**	0.044	0.190**	0.127*	-0.040	0.010	0.087
Visitors' behavior	0.039	0.136*	-0.031	0.122	0.033	-0.055	-0.052	0.025
Treatment of animals	0.033	0.144*	-0.032	0.113	0.045	-0.041	-0.055	0.028
Zoo keepers' background and behavior	0.007	0.105	-0.088	0.085	-0.005	-0.102	-0.110	-0.030
Displayed animals' origin	-0.059	0.035	-0.121	0.082	0.010	-0.119	-0.094	-0.065

^{*}Significant at the .05 level. **Significant at the .01 level (two-tailed tests).



Discussion

Research Question 1

As was noted earlier in the paper, research question 1 refers to the relative importance of various aspects of the previously mentioned three constructs of tourists' ethical evaluation of animal-based attractions. Although it is often assumed that people regard entertainment and recreation as the most important justifications for animal-based attractions (Turley, 1999; Ryan & Saward, 2004), analysis of data reveals only partial confirmation of this supposition. Family-oriented experience was found highly significant, second only to the role of animal-based attractions in conservation, yet the role of entertainment received among the lowest scores for justifications. Consequently, it can be concluded that participants view animal-based attractions as family-oriented recreational sites, providing a relaxed atmosphere for parents and children and an opportunity to strengthen family relationships, similar to results from some previous studies (Turley, 2001). Mere entertainment, however, was not seen as a central justification for existence of the attractions. This finding points to the marketing success of animal-based attractions in shifting their positioning from strictly entertainment and amusement providers—which might not be morally acceptable as their sole role—to more socially and environmentally responsibly leisure centers (Mason, 2000).

The role of animal-based attractions in education—which in many cases is compatible with its role in conservation— was also regarded as highly important in the current study (behind "family-oriented experience"). Education is indeed one of the central missions of many modern animal-based attractions (Fraser et al., 2007), and numerous educational initiatives are launched in attempt to educate visitors on environmental issues, also in a response to visitors' requests for more information on animals and their natural habitats.

An issue that has received much less attention in the literature on visitors' perceptions of animal-based attractions is the view of the sites as secure and affordable alternatives to nature, which was also seen by this study's participants as a central role of such sites. Since witnessing wildlife in its natural habitat (e.g., safari tours in Africa) might be perceived as a very expensive and dangerous adventure, protected tourist settings represent a safe and inexpensive fulfillment of the desire to watch wildlife. As argued by Shackley (1996), "if the tourist is unable to visit the animal in its natural habitat then there is only one solution: the animal must come to the tourist" (p. 97). Attractions are seen as enabling "ordinary" people to participate in activities normally reserved exclusively for wealthy tourists or wildlife professionals, thus leading to a form of "social justice". The findings of this study confirm that this aspect is indeed perceived by tourists as major justification for the existence of animal-based attractions.

Besides the four main justifications for animal-based attractions revealed in the study's analysis, other justifications were ranked much lower in importance by the participants. In addition to the role of entertainment, discussed above, scientific research was found to be less important, especially compared with issues such as conservation and education. It appears that many tourists are not fully aware of the attractions' research activities, or do not perceive them in and of themselves as meaningful justification for animal-based attractions. Scientific research might also be viewed as an uninteresting and unexciting topic compared with the high-profile image of environmental issues, especially conservation and preservation. Nonetheless, this finding points to a missed opportunity for animal-based attractions to

strengthen their legitimacy and improve their image among the public, as research conducted at these sites positively contributed to an understanding of wildlife's characteristics and needs, and thus allowed for development of better conservation and environmental plans (Hutchins, Dresser & Wemmer, 1995). Scientific studies conducted in animal-based attractions have also led to substantial improvement in veterinary care for both wildlife and domestic animals.

The next construct in the ethical evaluation of animal-based attractions includes the conditions for their ethical operation. The findings reveal that almost all aspects of this construct were seen by respondents as very important (only one condition had an average score of less than 4.00 on a 1-5 scale). Yet the results for this construct should be interpreted with caution, as they might have been influenced by social desirability, which is common when people are asked directly about ethical preferences.

It should be stressed that although the conditions of natural environment and natural behavior of animals received relatively high scores, other conditions ranked higher in importance, such as treatment of the animals (e.g., providing them sufficient food and medical care), zoo keepers' education and sensitive behavior toward the animals, and training methods used with the animals. These findings indicate that the contemporary animal welfare approach has had a substantial influence on tourists' ethical evaluation of animal-based attractions. Note that despite their perceived importance for participants, these conditions are not likely to be easily evaluated by visitors, as most encounters by zoo keepers and animal trainers take place outside public areas and the sight of visitors. Consequently, in light of the importance of these factors, attraction managers face the challenge of finding creative ways to inform visitors of the treatment received by animals behind the scenes. Such information can favorably influence ethical evaluation by visitors.

Another condition that received a very high score of importance (equivalent to the importance of condition of training methods) was visitor behavior at the sites, a factor given very little attention in the literature on animal-based attractions. This condition for ethical operation of animal-based attractions is distinctive, compared with the other conditions, since visitor behavior is not under the direct control of attractions, although techniques can be employed to encourage respectful behavior by visitors.

The conditions of natural environment and natural behavior of animals (see also Curtin & Wilkes, 2007) were also seen as very important in the ethical evaluation of animal-based attractions, though to a slightly lesser extent than the above conditions. As previously argued by Hughes et al. (2005), what visitors find ethically acceptable has changed over time, with a shift to a preference for naturalistic presentation of animals. Many animal-based attractions have responded to this request and to the need to address animal welfare concerns, taking a series of actions to enrich their environments (Mellen & MacPhee, 2001).

Finally, the last construct in ethical evaluation deals with the driving forces for ethical operation of animal-based attractions, and includes the aspects of public opinion, and legal system and institutional supervision. The results revealed that participants regarded both aspects as almost equally but moderately important. Taking into consideration the importance scores of various aspects of the other constructs, it can be concluded that participants did not express a very high trust in the capability of public opinion and legal institutional supervision to influence animal welfare at the attractions, although such trust nevertheless seems to exist to a certain extent. The lack of attention in previous studies to these aspects and their roles in the ethical evaluation of animal-based attractions prevent cross-validation of these

findings; nevertheless, future studies of tourists' perceptions of animal-based attractions can use them as useful indicators and as benchmarks for comparative assessments.

Research Question 2

The second research question addressed in the current study refers to the examination of the factors that contribute to tourists' attitudes toward animal-based tourist attractions, as well as their relative importance. The study's results reveal that participants' ethical attitudes toward animal-based attractions vary significantly across attraction types. The most morally acceptable attractions for the participants were safari or wildlife parks, aquariums, and zoos, followed by animal theme parks, which were also perceived as fairly morally acceptable. On the other hand, animal circuses, rodeos, animal racing, and especially bullfighting were seen overall as morally unacceptable.

These results confirm the findings of Wells and Hepper (1997) that people express more concern about leisure-oriented activities with potential killing and/or injuring of animals, compared with activities not perceived as causing pain and suffering to the animals. Note that all the least morally acceptable attractions involve either training (e.g., circuses) or sport situations (e.g., rodeos and bullfights) that likely to be seen as inflicting suffering, distress, and/or death on the animals. Note that although animal theme parks were among the four most morally acceptable sites, they received lower scores than zoos and aquariums, despite their similarities, which implies that they are seen as a distinct attraction type with unique characteristics.

Examination of the association between attitudes toward animal-based attractions and the ethical evaluation of these sites revealed interesting results. Attitudes toward zoos, aquariums, animal circuses, safari parks, and animal theme parks were significantly related to each of the justifications for the existence of animal-based attractions. This can be seen as further confirmation of the importance of people's views on the roles of animal-based attractions, an issue that has received some attention in the literature (Jamieson, 2006). These findings support one of the basic assumptions of the model proposed by Shani and Pizam (2009) that ethical attitudes toward animal-based attractions are first and foremost based on the extent to which people agree with general justifications for having these sites in the first place. As noted, these arguments do not point to a specific attraction or location, but rather serve as an ideological basis for justifying or rejecting the existence of animal-based attractions. Although these attractions were characterized by different dominant justifications (alternative to nature for zoos and aquariums, entertainment for animal circuses and animal theme parks, and conservation for safari or wildlife parks), other justifications were found to be significant as well.

In regard to the belief in driving forces for ethical animal-based attractions, it was found that belief in the influence of public opinion on the attractions' ethical treatment of animals had the strongest association with ethical attitudes toward zoos, aquariums, animal circuses, safari or wildlife parks, and animal theme parks. On the other hand, belief in the legal system and institutional supervision as a driving force had either low or no correlations with attitudes toward these sites. These findings imply that informal pressure for ethical treatment of animals in attractions, such as public awareness and concern about negative public relations, might have a stronger weight in influencing attitudes toward such sites than more formal pressure such as governmental control and animal rights activism.

Although correlations do not prove causation, the above explanation seems quite plausible in light of the results of the preliminary qualitative study (Shani & Pizam, 2009), in which tourists testified that their attitudes toward animal-based attractions were positive because they believed these were now more ethically sensitive in their treatment of animals because of the "free market" approach, i.e., it is good for business. It should be noted that neither of the driving forces were found to be associated with attitudes toward animal racing, bullfighting, and rodeos. It is likely that since they are perceived as quite morally unethical in any case, belief in neither public opinion nor legal and institutional supervision has any effect on tourists' attitudes toward these sites.

Surprisingly, the perceived importance of the conditions for ethical operation of animal-based attractions had no or very limited association with attitudes toward these sites, especially when the relatively rigid linkage of these attitudes with justifications for animal-based attractions is considered. This was unanticipated mainly in light of clear previous indications that factors such as naturalistic presentation and natural behavior of animals are important in shaping tourists' attitudes toward contemporary animal-based attractions (e.g., Moscardo, 2007; Ryan & Saward, 2004). Although they should be verified in future studies, these findings indicate that the attitudes of people toward animal-based attractions are more related to a comprehensive perception of the attractions and their roles in society, rather than to consideration of specific operational issues related to individual sites. In other words, attitudes toward animal-based attractions are based on broad ideological foundations and considerations, while attributes of specific sites are given less weight.

Managerial and marketing implications of the research

This quantitative investigation provides some interesting insights and implications for practitioners. In regard to justifications for animal-based attractions, the repositioning of many of them as educational and conservation centers is clearly effective in providing legitimacy for their existence, as these aspects were regarded as highly important roles of animal-based attractions. Thus, attraction managers should continue launching conservation programs while providing information on them to visitors, as well as to the public at large in promotional materials and advertising. Another justification with strong perceived importance is the role of the attractions in providing family-oriented experience. The results clearly indicate that this should not be confused with mere entertainment, a role that is regarded as relatively unimportant as justification for animal attractions by the study's participants. Taking this finding into consideration, animal-based attractions should emphasize in their marketing campaigns that, in an era when it seems the family unit is crumbling, during a time when many leisure activities include individualistic high tech and/computerized devices, they provide one of the few low-tech tranquil experiences still remaining and allow families to explore and establish their relationship. The attractions can also offer specific activities and games intended solely for families at the sites themselves.

The fourth justification for animal-based attractions regarded as highly important in the study is their role as an alternative to nature. This role has received relatively little attention in the literature, as well as by the animal-based attractions themselves. Since tourists see the attractions as safe socioeconomic substitutes for watching animals in the wild, this theme has the potential to be successfully integrated into attractions' marketing messages. In this regard, advertising with slogans such as "Everybody Can Experience Africa" might be effective in enhancing the attractions' appeal. This argument in favor of

the existence of animal-based attractions can also be valuable for convincing public officials and local authorities of the value of issuing permits for the establishment of such sites, on the basis that they constitute a form of "social justice."

Regarding specific conditions (sites' attributes) for ethical operation of animal-based attractions, the extra attention currently given to natural presentation of the animals also seems to pay off, as it was found to be an important factor in people's ethical evaluation of the attractions. Additionally, emphasizing the measures taken to ensure the safety of animals, staff, and visitors is also expected to have a positive effect on visitors. Since people expect that in ethical attractions the exhibited animals will express "natural behavior," it is necessary to (1) prevent captive (stereotypical) behavior by animals and (2) provide sufficient explanation of the behavior of animals in nature, thus preventing misperceptions about captive animals' behavior.

Limitations of the study

The current study has its limitations. First, as an exploratory study conducted with non-probability sampled participants, the study cannot be considered representative of the opinions and attitudes of all tourists to Central Florida and/or those who visit animal-based tourist attractions. Second, the survey was conducted among tourists in Central Florida, a prominent tourist destination that includes major well-known animal attractions. Thus, the results of the study should be generalized with great caution, as external validity appears to be limited for the current investigation. Last but not least, as is typical with surveys dealing with ethical issues, the results might have been affected by social desirability. It should be mentioned, however, that attempts were made to reduce these concerns.

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