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Tourists' Attitudes Toward The Use Of Animals In Tourist Attractions: An Empirical Investigation

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TOURISTS' ATTITUDES TOWARD THE USE OF ANIMALS IN TOURIST ATTRACTIONS: AN EMPIRICAL INVESTIGATION

by

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ABSTRACT

From time immemorial human beings have utilized animals for various needs and purposes, which led societies to debate the justification for using animals and to reflect on the way in which animals are treated. These concerns have also resulted in various contemporary studies aimed to reveal interest groups' – as well as the general publics' – views and opinions on the issues under dispute. Nevertheless, 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. Moreover, despite certain preliminary attempts to investigate people's perceptions of the use of animals in attractions, their attitudes for the most part are still ambiguous and speculative. Consequently, the purpose of the current research was to fill these and other gaps in the literature by investigating tourists' attitudes toward various animal-based attractions.

The theoretical framework used for the study was based on a previous exploratory qualitative research, which also assisted in developing the research questions and hypotheses as well as in constructing the study survey. Therefore, the current study's instrument attempts to cover the main aspects of tourists' attitudes as they appear both in the literature and in the exploratory study. The survey was conducted among 252 tourists to the Central Florida area, using judgmental sampling with the intent to ensure heterogeneity among the study sample. Prior to addressing the research questions, the study instrument was tested for reliability and validity, which were found to be at satisfactory levels.

The statistical analyses revealed some interesting findings with important implications for both research and practice. While several inquiries were evaluated in the course of the dissertation, 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. In addition, belief in the positive effects of public opinion on attractions' ethical treatment of animals was found to have a greater association with tourists' attitudes, in comparison to more formal supervision and regulations. No less important, the study's findings confirm the heterogeneous nature of animal-based attractions as perceived by tourists, where multiple dominant factors influence attitudes toward diverse attraction types.

Following the description of the results, the dissertation offers specific recommendations based on the findings 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. The study can be seen as one of the few comprehensive attempts to investigate tourists' attitudes toward animal-based attractions in the tourism literature, which can also serve as a benchmark and a basis for future studies on this contentious issue. The paper ends with an assessment of the study's limitations, and a series of suggestions of relevant topics for future investigations.

This dissertation is dedicated to my beloved late grandparents, Moshe Grossman and Hanna Sheinman, of blessed memory, who did not live to see this day, but without whom this dissertation would not have become a reality.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

Introduction

This study intends to examine tourists' attitudes toward the use of animals in tourist attractions. The current chapter begins by providing general background on tourism ethics in general, and on ethical issues related to featuring animals in tourist attractions in particular, followed by a justification of the importance of the study by identification of a gap in the literature. After a statement of the purpose of the study, a brief description of the research model to be used in the study is provided. The research questions are then presented along with a brief description of the methodology of the study. Next, the significance of the proposed study is discussed with respect to its potential theoretical and practical contributions, followed by the study's limitations.

Background

Tourism Ethics

The contemporary tourism industry faces unique and difficult ethical challenges. Various ethical concerns and dilemmas have emerged concerning different aspects of the industry, especially regarding its negative social, cultural, and environmental impacts (Hudson & Miller, 2005). Numerous studies have dealt with the effects of tourism on the natural environment, often the very feature that mainly motivates tourists to visit an area but that has often been spoiled and polluted by irresponsible tourism development and exploitation (Wall, 2001) and by negligent behavior by the tourists themselves (Cohen, 1978). The industry often makes a massive impact on local communities. Although the economic impact—creating jobs, tax revenues, and

salaries—is mostly perceived as positive, there may also be some undesirable economic consequences, such as increased costs of goods and services and a spiraling rise in the price of real estate (Milman & Pizam, 1988).

In addition, perhaps more critically, negative sociocultural impacts have been identified on host societies. As noted by Goeldner and Ritchie (2006), locals might feel that their culture is held in contempt by the "folklorization" of the local tradition and the "trinketization" of craft and art for souvenirs, while they are also faced with expeditious infrastructure, crowdedness, and a change of lifestyle. Conflict and resentment between tourists and residents have also been noted, some of which may have resulted from cultural and social differences between tourists and residents, or other conflicts that may have been instigated by a hostile political atmosphere (Pizam, Jafari, & Milman, 1991; Milman, Reichel, & Pizam, 1990; Uriely, Israeli, & Reichel, 2002).

The tourists themselves have also received attention in relation to certain types of behavior that may cause discomfort and resistance among hosts, and which are often perceived as ethically problematic. These include the excessive consumption of alcohol and drugs (Uriely & Belhassen, 2006), immoral sexual conduct (Kibicho, 2005), and a disrespectful attitude toward locals (Maoz, 2006). In most of the cases, it was argued that tourists tolerate these types of behavior while on a trip, although at home, they would probably not exhibit these attitudes and forms of behavior.

Most of the issues mentioned above have been extensively surveyed in the tourism literature, resulting in a call to create models and frameworks that would minimize the negative aspects and increase the benefits for social and physical environments. Among the prominent concepts suggested have been "sustainable tourism," "ecotourism" (Uriely, Reichel & Shani,

2007), “responsible tourism” (Reid, 2003), “alternative tourism” (Eadington & Smith, 1992), “community-based tourism” (Jones, 2005), “pro-poor tourism” (Bowden, 2005), and “poverty alleviation tourism” (Harrison & Schipani, 2007). To cope with some of the ethical challenges that frequently occur in the tourism industry, researchers have suggested adopting ethical codes of conduct for the different components of the tourism industry (e.g., Payne & Dimanche, 1996).

One issue that, to this day, has received far less ethical and practical consideration in tourism studies involves ethical concerns and dilemmas regarding the management and operations of tourist attractions. Tourist attractions (including amusement parks, theme parks, and other attractions, such as zoos and aquariums) are considered today one of the favorite modes of mass entertainment (Milman, 2001). Rubin (2007) reports that in 2006, 185.6 million people visited the world’s top 25 theme parks and attractions (i.e. parks with over 3.9 million visitors annually). According to the International Association of Amusement Parks and Attractions (IAAPA), more than 600 theme parks and attractions operate in America alone, while it is estimated that half of the American population have visited at least one of these attractions (Milman, 2008). In the US alone, there about 400 amusement parks and traditional attractions, which were visited by 335 million people in 2006, generating approximately $11.5 billion in revenues in 2006 (Milman, 2009).

Despite the significance of the attraction industry, as well as its social, cultural, and educational importance (e.g., Croce, 1991; Formica & Olsen, 1998; King, 1981), ethical issues concerning the operation of attraction sites have, for the most part, been overlooked in the tourism and leisure literature, despite ethics being a concern in many aspects of attraction operations. The relatively few references that do relate to such issues often focus on iconic theme parks and attractions (particularly the Disney parks), and examine, from an ethical perspective,

topics such as the common practice of emotional labour (Bryman, 1999; Van Maanen, 1991), racial and sexist representations in exhibits and shows (Rojek, 1993), as well as other historical and cultural interpretations that have been criticised as biased and misleading (Salamone & Salamone, 1999). The lack of in-depth discussions of the ethical issues involved in attraction management and operations is particularly noticeable regarding the substantial incorporation of animals into tourist attractions. Very few of the ethical issues relating to the use of animals in tourist attractions have been analyzed and discussed (and if so, mostly in disciplines other than hospitality and tourism), nor have any specific codes of conduct been proposed.

Incorporating Animals into Tourism Activities

Animals are incorporated into the tourism industry in various ways. Consumption-oriented forms of wildlife tourism, such as hunting and fishing which, in most cases, end with the killing of the animals, are still popular leisure activities in many countries (Tarrant & Green, 1999). For example, according to the U.S. Fish and Wildlife Service's latest survey report (2007), 13 million people practiced hunting in the United States in 2001 and spent $20.6 billion pursuing this hobby. Nevertheless, the heavy reliance on animals in the tourism industry nowadays is expressed mainly through what is usually perceived as non-consumption-oriented tourism. Non-consumptive tourist-wildlife interactions can take place in three main settings: wild, semi-captive, and captive settings (Orams, 1996). Wildlife tourism is one of the fastest growing sectors worldwide (Rodger, Moore, & Newsome, 2007), and Higham, Lusseau and Hendry (2008) stated that interacting with and observing wildlife in their natural habitat has moved from the domain of 'specialists' into the mainstream of the tourism industry. Yet most tourist-wildlife interactions occur in environments with some degree of human-made elements,

where wildlife animals are displayed to visitors, either in semi-captive settings (such as wildlife parks and sea pens), or in captive settings (such as zoos, aquariums and animal shows) (Mason, 2000; Orams, 1996).

Observing wildlife in captive settings has long been an important leisure activity in contemporary society (Tribe & Booth, 2003). Shackley (1996) explained that for many market segments, watching wildlife in their natural habitat is often expensive and/or dangerous, and requires traveling to remote destinations. Therefore, tourist attractions which include a collection of wildlife in some kind of captivity were established, constituting a central institutional location of wildlife presentation for the wide public (Beardsworth & Bryman, 2001). While they all involve the display of captive wildlife, these attractions are not homogenous and differ based on their objectives, species emphasis, activities offered to the visitors, and the level of confinement experienced by the wildlife (Shackley, 1996). Most of the animal-based attractions in captive settings are typically referred to as zoos, although they include a variety of sites such as conventional zoos, marine parks, aquariums, theme parks, safari parks, and sea pens (Orams, 2002).

While zoo attendance patterns in the past decades vary for different regions and countries, the analysis of Davey (2007a) reveals that visits to zoos in the U.S. and the UK have increased in the past 20 years. According to the World Association of Zoos and Aquariums (2007) more than 10,000 zoos and aquariums operate worldwide, serving over 600 million people each year. It is estimated that in the U.S. there are approximately 355 zoos, while 29 of them receive more than 1 million visitors annually. For example, the ten theme parks of Anheuser Busch in the U.S. (e.g. SeaWorld, Discovery Cove and Busch Gardens) received 22 million guests in 2007 (Anheuser Busch, 2008), and generated a revenue of $US 1.1 billion, in

2005 (Lück & Jiang, 2007). It should be noted that zoos and other animal-based attractions include both profit and non-profit institutions, and are often accessible to wide segments of the U.S. population (Cain & Meritt, 2007). Stone, Tucker, and Dornan (2007) also showed that the offering of interactions with animals as part of itineraries can positively contribute to people's selection of vacation packages.

Although the debate on animal rights in modern society has focused mostly on the ethical aspects of using animals in experiments and raising animals for food (Singer, 1975, 2002), the issue of incorporating animals into tourism, entertainment, and recreational initiatives has been receiving some attention in recent years from both scholars (mostly from disciplines other than hospitality and tourism) and practitioners. Animal welfare and animal rights organizations have severely criticized animal-based attractions and their treatment of animals. Among their arguments are the disruption of family groups and other sophisticated social structures during transport, poor captive surroundings, encouragement of unnatural behavior through training methods involving food deprivation and reward, and, generally, maintenance of the animals in an atmosphere that does not involve any respect toward them, in which their welfare and dignity are seriously damaged (e.g., Agaramoorthy, 2004; Beardsworth & Bryman 2001; Cataldi, 2002; Hughes 2001). Some philosophers and scholars utterly reject ethical justifications for keeping animals in attractions, regardless of the captive conditions or the relative well-being of the animals. The main reason for doing so is the argument that animal-based attractions deny the intrinsic value of the animals in relating to them as resources rather than as purposive agents in their own right (Jamieson, 2006; Regan, 1995).

In a response to the aforementioned harsh criticism, many animal-based attractions have begun—at least officially—to emphasize the educational and preservation aspects of their

activities, rather than strictly providing entertainment and amusement. In this regard, the role of these attractions is developing as places which enable adults and children to observe live animals; to add to biological knowledge; to assist in the care and breeding of animals; and to help the management and conservation staff find solutions to human medical problems (Mason, 2000). In addition, significant techniques have been implemented to improve the welfare and quality of life of captive animals in tourist attractions, including providing wide open spaces, as well as behavioral and environmental enrichments (Ben-Ari, 2001; Davey, 2006). Changes in visitors' tastes have also contributed to improving animal welfare in these attractions, to a certain degree (Shackley, 1996). In this regard, Hughes, Newsome, and Macbeth (2005) argue that what visitors find entertaining has changed over time, with a shift from circus-type presentations to more naturalistic presentations of animals, with captive wildlife occurring in spacious areas, in contrived "natural" environments (see also Moscardo, 2007).

Nevertheless, although friendly design of animal-based attractions has been shown to contribute to visitors' enjoyment, these attractions are still perceived as places of entertainment, relaxation, and family-oriented trips, while the educational motives have often been found to be less important (Bostock, 1993; Ryan & Saward, 2004). In addition, in many cases the centrality of the entertainment component in these attractions and the need to enhance visitor satisfaction lead to compromise in the welfare of the animals exhibited. For example, the desire of many visitors for high visibility of the animals may clash with the needs of animals for "private places" (Hall & Brown, 2006; Reynolds & Braithwaite, 2001). In any case, using animals in tourism has remained a highly contentious issue (Jamieson, 2006), when on the one hand seeing animals in captivity is still one of the most popular leisure activities in the Western world, while on the

other it stirs the emotions of animal rights' advocates but also arouses certain concerns among the general public as well.

Problem Statement

Despite growing concerns and attention regarding animal rights issues, both in theory and in practice, still only limited efforts have been made toward broadly exploring the ethical aspects of using animals for entertainment, particularly in the tourism literature (Hall & Brown, 1996). Moreover, although the use of animals in the tourism industry has come under growing scrutiny, especially on the part of scholars and animal rights activists, little is known about the perceptions of the tourists themselves - and of the public at large - regarding the use of animals in tourist attractions. Despite certain contributions to the knowledge about people's attitudes and perceptions toward using animals in entertainment (e.g., Curtin, 2006; Curtin & Wilkes, 2007; Klenosky & Saunders, 2007; Mason, 2007; Rhoads & Glodsworthy, 1979), these studies are based mostly on specific case studies and anecdotes, and do not offer a holistic view of visitors' attitudes or the major influencing factors. Their ethical approach to the issue remains, therefore, ambiguous and speculative.

As recently argued by various researchers (Davey, 2007b; Frost & Roehl, 2007; Jiang, Lück & Parsons, 2007; Woods, 1998), there is a need for more studies investigating the ethical views and perceptions of visitors toward animal-based tourist attractions. Since animal-based attractions heavily depend on paying visitors to offset their operation costs and finance their education and conservation programs (e.g., Catibog-Sinha, 2008; Mason, 2007), empirical evidence on this issue is of great necessity for their marketing and operational decisions. Moreover, a better understanding of tourists' attitudes toward such attractions can also be used

by animal rights organizations to design effective campaigns aimed at increasing public awareness of their messages.

Purpose of the Study

The main objective of this research is to investigate tourists' attitudes towards animal-based attractions. Note that although many definitions of attitudes have been proposed, the current study refers to attitudes as the tourists' ethical evaluation and judgment of the entity in question (i.e. animal-based attractions), as expressed by some degree of favor or disfavor (see Ajzen & Fishbein, 1977; Fazio, 1986). Although tourist-wildlife interactions might take place in semicaptive (e.g., wildlife parks, sea pens, rehabilitation centers) and wild (e.g., national parks, migratory routes, breeding sites) environments (Orams, 1996), the current study will focus on tourist-wildlife interactions in captive settings only, which will be referred to as animal-based tourist attractions. Such settings include mainly zoos, aquariums, oceanariums, aviaries, theme parks, and animal shows. Human-animal encounters in captive settings contain more unique and distinctive ethical challenges than other forms of wildlife tourism (see Shackley, 1996), thus require separate consideration when examining tourists' attitudes toward such attractions.

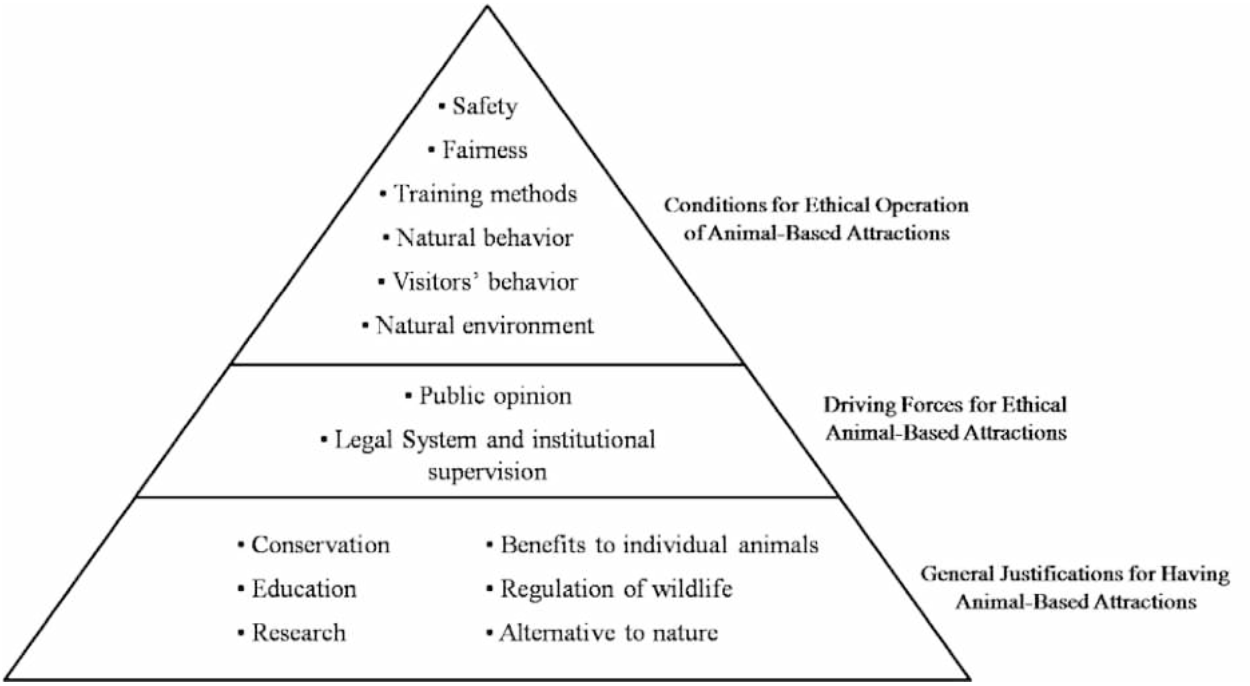
The study aims to contribute both to the literature on tourism ethics and to the general literature on animal rights, which so far have dedicated relatively little attention to the incorporation of animals into tourist attractions. In addition, gaining information on tourists' ethical attitudes toward the use of animals in tourist attractions aims to assist relevant stakeholders of such attractions (e.g., corporations, management, animal rights organizations) in their decision-making processes. To meet these goals this study will strive to achieve the following: (1) design a comprehensive research instrument to investigate tourists' attitudes

toward animal-based attractions; (2) identify the factors influencing tourists' attitudes toward animal-based attractions; (3) weigh the influential factors in tourists' ethical judgments of animal-based attractions; (4) evaluate the relationship between these factors; (5) examine the relationship between the visitors' profiles and their perceptions of and attitudes towards animal-based attractions; and (6) investigate the effects of attitudes towards animal-based attractions on the tourists' behavioral intentions in relation to these attractions.

Theoretical Framework

The theoretical framework of this study is based on preliminary exploratory qualitative research, conducted by Shani and Pizam (Forthcoming), as well as other previous studies focusing on tourists' perceptions of animal-based tourist attractions (e.g., Benkenstein, Yavas & Forberger, 2003; Hughes et al., 2005; Mason, 2000; Ryan & Saward, 2004; Turley, 1999, 2001; Tomas, Scott, & Crompton, 2002). The tourists' ethical evaluation of animal-based attractions will be measured using three constructs: (1) general justifications for animal-based attractions; (2) belief in driving forces for ethical animal-based attractions; and (3) conditions for ethical operation of animal-based attractions (see figure 1).

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



Source: Shani & Pizam (Forthcoming)

Figure 1: The Three Layers of Ethical Perception of Animal-Based Attractions

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, relationships between factors as well as 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. In addition, the effects of socio-demographic characteristics and past visitations of tourists on their evaluation of and attitudes towards animal-based attractions, as well as the effect of these attitudes on the behavioral intentions of tourists to visit animal-based attractions should also be investigated, as the practical implications of these attitudes are also still vague and inconclusive.

Research Questions

The study will be guided by the following questions:

1. Is there a relationship between a visitor's profile and his/her frequency of visits to animal-based attractions?
2. Is there a relationship between a visitor's profile and his/her evaluation of animal-based tourist attractions?
3. Is there a relationship between a visitor's frequency of visits to animal-based attractions and his/her ethical evaluation of those attractions?
4. What are the prominent aspects of ethical evaluation of animal-based attractions?
5. What factors contribute to tourists' attitudes toward animal-based tourist attractions, and what is their relative importance?
6. What is the relationship between visitors' attitudes about animal-based attractions and the likelihood they will visit such attractions in the future?

Study Methodology

The study investigates tourists' attitudes toward animal-based tourist attractions by a quantitative survey that was administered to tourists in Central Florida. The instrument is based on an extensive literature review and a preliminary exploratory qualitative study conducted by Shani and Pizam (Forthcoming), whose goal was to explore the themes, concerns, and issues involved in the attitudes of tourists toward animal-based tourist attractions. Therefore, the current study's instrument attempts to address the previously mentioned research questions by covering the main aspects of tourists' attitudes as they appear both in the literature and in the exploratory study.

The tourists in the study were approached according to the principles of "heterogeneous purposive sampling" (Finn, Elliott-White & Walton, 2000), in which the intent is to ensure heterogeneity among the participants, albeit without applying random sampling methods. For the purpose of the current study, a tourist is defined as a person at least 18 years old who stayed overnight in a paid accommodation in Central Florida. The tourists were interviewed in five different hotels in Central Florida, with an overall sample size of 252 participants, which allows adequate statistical analyses to investigate the research questions.

Significance of the Study

The major theories and studies published on animal rights have barely addressed the issue of using animals for amusement and entertainment purposes. The animal rights debate, both in theory and in practice, has focused mostly on the ethical aspects of using animals in experiments and raising animals for food. However, one might think of three reasons that the relative disregard of animals in entertainment on behalf of researchers has been a missed opportunity,

and why devoting consideration to this matter is vital to our understanding of human-animal relations.

First, using animals for entertainment and tourism purposes is not a matter of critical necessity for human beings—or for the animals themselves. While it is highly controversial whether human beings are genetically programmed to be meat-eaters, and thus whether animal protein is vital for our health (Shani & DiPietro, 2007), and what the true contribution of most of the experiments conducted on animals is (Roberts, Kwan, Evans, & Haig, 2002), no serious argument can be made that animal-based attractions are essential for human survival. If, indeed, the need for such activities is trivial compared with animal-based nutrition and medical experiments, a serious discussion should take place as to why, in spite of this and of our ethical development, there is a massive incorporation of animals into the tourism industry that is substantially popular among the wide public.

Second, most people have no direct contact either with animals reared for food (especially in modern "factory farms"), or with laboratory animals. However, many people in Western society often encounter animals as part of their leisure activities. Besides the steady popularity of pets, there are other options for encountering animals, ranging from animals in captivity, through semi-captivity, to animals in the wild (Orams, 1996). This offers us a true opportunity to investigate our relationship with animals (and the wild nature) from an ethical point of view in a way that will be more perceptible to and observable by many people (see Frazer, Gruber, & Condon, 2007).

In addition to these theoretical contributions to the understanding of the human-animal relationship, investigating tourists' attitudes towards animal-based tourist attractions is also expected to yield practical implications. Empirical evidence on this issue is very important both

for tourism businesses and for animal rights' movements. The former can be assisted by such information in their attempt to plan effective marketing campaigns, to achieve customer satisfaction, and to increase attendance at their properties (Catibog-Sinha, 2008; Mason, 2007); and the latter can use such information to design effective PR campaigns aimed at disseminating their message.

Finally, since the tourism literature has almost entirely ignored the issue of animal ethics, and particularly the tourists' point of view toward animal-based tourist attractions, the current study can be seen also as a basis for future research on the subject. Specifically, the instrument to be developed for the study can be used in future studies in different settings, while validating/refuting the results of the current research. Since research on animal ethics in tourism is at its beginning, such an instrument can be of great value in upcoming empirical investigations.

Limitations of the Study

The current study is not without limitations. First, this study was conducted with non-probability sampled participants, whose opinions thus cannot be considered representative of the opinions of all tourists attending animal-based tourist attractions. Second, as with the preliminary focus group sessions, the survey will be conducted among visitors to Central Florida, a tourist destination that includes major well-known animal attractions such as Sea World, Busch Gardens, Animal Kingdom, Gatorland, and numerous dinner shows featuring animals. Therefore, it is likely that the participants' responses will be influenced by the context of the destination. For these reasons, the study results should be generalized with caution, as external validity seems to set some limitations to the study, while other destinations should be examined in future

research. Lastly, there is a concern that the views expressed by the participants were affected by social desirability, as the use of animals in entertainment involves ethical and moral issues. Nevertheless, the study's instrument was constructed with caution, and the questions are phrased in a nonjudgmental manner. In addition, the anonymity of the participants was guaranteed, thus allowing them to express their views freely.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

The current chapter presents the theoretical foundations to the proposed research. The literature review examines two main areas which are both essential in providing the context to the current study. First, the animal rights debate will be discussed, including relevant aspects which encompass this contentious issue, such as the religious discourse, the dispute on animal physical and mental capabilities, and, most essentially, contemporary philosophical theories regarding questions of animal rights and welfare. In addition, existing evidence regarding people's attitudes towards animals are also described. The contents of this section are derived mostly from the general literature, rather than tourism studies, yet it is critical for deeper background understanding of the subject under investigation. The second section of the literature review specifically deals with issues regarding animal use in tourism and entertainment, including evaluation of the previous studies in the field and identification of a gap in the literature. The chapter ends with a detailed description of a previous exploratory study whose findings were utilized in designing the current study.

The Animal Rights Debate

From times immemorial, human beings have been debating about their attitudes and behavior towards non-human animals (hereinafter "animals"). Although in certain eras, animals were sometimes worshipped as gods, they have, for the most part, been used for various human needs and purposes (Orams, 2002), which in many cases implies inflicting pain and suffering on

them. Animals have been reared and hunted for food, used in agriculture and transportation, have served as scientific research subjects and for entertainment and amusement (Bowd, 1984).

The general discomfort and concerns which arose from using animals to serve man have caused societies, through their philosophers and scientists, to reflect on the way animals were treated. Typically, the purpose was to formulate ideas and theories, which would justify maintaining the current state and would perpetuate the view of animals as being subordinate to humans. For the sake of this purpose, both religious and secular justifications were raised throughout history. While the religious reasons are naturally more ancient, they have also made their way into today's discourse on the status of animals in modern society.

The Religious Discourse

Most of the world's main religions support or at least enable the domination of man over animals, though not without limitations. Although protecting the welfare of some animals and rituals designed to minimize suffering are found in Judaism, Islam and to a lesser degree Christianity (Coşgel & Minkler, 2004). Waldau (2006) notes that the Abrahamic traditions are "characterized by the recurring assertion that the divine creator specially elected humans and designed the earth primarily for our benefit rather than for the benefit of all forms of life" (p. 74). The main Eastern religions - Hinduism, Buddhism and Jainism - adopted a different approach when asserting that humans and animal are interconnected through reincarnation, thus animals are human souls in a different bodily form (Coward, 2007). However, humans are still considered superior to animals, especially because they have a mental and spiritual conscience. Because the law of *karma* (the belief that all living beings are born and reborn into stations of life, based on their past deeds) is central in these traditions, this means that animals acted in

previous lifetimes in a way that justify their current inferior status (Waldau, 2006). Consequently, the domination of man over animals is approved even by the Eastern religions, though it might take different forms than in the Abrahamic traditions (Fox, 1978).

Nevertheless, within the entire spectrum of world religions, a minority of religious leaders hold alternative views on human-animal relations. While in most cases, they still do not advocate the granting of moral rights to animals, they express compassion and encourage a greater consideration for their needs. Besides the Eastern religions' mass adoption of vegetarianism, some religious streams in Judaism and Christianity also encourage their followers to adopt vegetarianism as a way of life (Sabaté, 2004). Rabbi Stephen Fuchs (2003), for example, argues that although in Genesis God grants us to "have dominion" over the fish, birds and beasts, this means to be responsible for them (i.e. treat them kindly), rather than to exploit them mercilessly. He further argues that initially, God intended humans to be vegetarians, but that after the flood, man was permitted to eat meat because of God's frustration over human nature. However, according to Fuchs, adopting a compassionate and caring way of life (including abstaining from eating meat) brings us closer to God's initial plan, and fulfills the divine potential with which God created man.

The Question of Animal Capabilities

Dealing with the moral issue of the way animals are treated is not limited to the religious sphere. Scientists have been debating this issue mainly from a rational and secular point of view - which, at times were marked by some religious influences. Throughout history, supporters of the use of animals for human purposes were, of course, the vast majority. One of the most influential thinkers in this regard was the 17th century French philosopher René Descartes.

According to his 'animal machine' doctrine, animals, in contrast to humans who were created in the image of God and have souls, are merely machines and automata. Therefore, they cannot think, nor do they have language, self-awareness, or feelings. Descartes' doctrine had a major impact in those days, especially in the field of animal experimentation (see Cottingham, 1978, for Descartes' approach to animals). Approaches that deny the ability of animals to feel pain and suffering are not currently common. In her survey, Dawkins (2006) describes three sources of widely accepted evidence that animals are capable of feeling pain and suffering: (1) physical health - most animals have a nervous system that is very similar to that of humans; thus injury or disease is likely to cause them pain; (2) physiological signs - expressions of stress and discomfort, such as changes in brain activity, heart rate, and body temperature; and (3) behavior - vocal or physical expressions of pain, the avoidance of situations that cause pain, and the attraction to situations that cause pleasure. Nevertheless, although not widespread, arguments which reject animal suffering still appear in the animal rights' debate. More recently, Bermond (1997) claimed that pain and suffering are in essence emotional and conscious experiences. Since there is no evidence showing that most animals are self-aware, it is likely that most animals are unable to experience suffering. However, as noted before, other types of arguments are at the center of the justification of the use of animals.

Assuming that animals are indeed capable of experiencing pain and suffering, the premise according to which animals are irrational, inferior creatures that do not have self-awareness, led to a cross-cultural philosophy which maintains that animals are a means to accomplishing human purposes, and not an end in themselves (See, e.g., Broadie & Pybus, 1974, on the 18th century German philosopher Immanuel Kant's perspective on animals). Contemporary research on animals, nonetheless, reveals that at least a few non-human species

possess characteristics that differentiate them from other animals and even classify them as *persons* (beings with certain complex forms of consciousness), or at least *borderline persons*. Degrazia (2006) reports on several studies which exemplify how a few Great Ape species (bonobos, chimpanzees, gorillas and orangutans) and dolphins, and perhaps others, have human properties, such as social self-awareness, reasoning, planning, moral thinking, future awareness and even, in some cases, enough linguistic competence to count as possessing a language. These types of research lead to arguments that the findings on the resemblance of great apes to humans must result in their receiving full equal consideration - eliminating their confinement, their use as research objects and the destruction of rainforests (Cavalieri & Singer, 1993). But this, as noted before, is a much more recent development.

Over the years, certain philosophers and researchers presented perspectives on the issue of animal rights that differed from mainstream philosophical thinking, but without widespread recognition of their ideas. The foundations of this philosophy were not seriously questioned until the 1970s. Indeed, animal welfare organizations were established in Europe, and dissatisfaction and protests against the maltreatment of animals in research and agriculture were apparent before. However, the animal rights movement as we know today, with organized doctrines, theories and ideas, only started developing in the early 1970s.

Contemporary Philosophical Theories

The most important book written in the 1970's, which still has an enormous influence on the animal rights' debate today, is "Animal Liberation" by the Australian Philosopher Peter Singer, first published in 1975. Singer, who belongs to the utilitarian school of philosophy, presented a profound and shocking claim against the treatment of animals in Western society.

The major change in Singer's approach, compared to previous attempts at protesting against the current practices toward animals, lay in his insisting to stick to a rational, cold and unemotional line of argument, leading to his conclusions. He argued that acting towards changing the way society perceives and treats animals is only a moral conclusion derived from a logical ethical analysis of the subject.

At the heart of his analysis, Singer made an analogy between the historical struggles and arguments for equal rights on behalf of blacks and women, to his current demand for the recognition of animal rights. In his view, there are no fundamental differences between discrimination on the basis of race (racism), gender (sexism) or species (speciesism). All the arguments put forward in order to justify the domination of one group over another are arbitrary. Many have countered this argument by stating that while racism and sexism are based on false assumptions (that women and blacks are mentally or physically inferior to white males), animals clearly do not share the same characteristics as humans. Thus discriminating against them is justified. For example, Machan (2002) recently claimed that "one reason for that propriety of our use of animals is that we, as members of the human species, are more important or valuable than other animals and some of our activities may require the use, even killing, of animals in order to succeed at our lives, to make it flourish most" (p. 9).

As a response to such views, Singer (2002) argues that it leaves us with no defense from other possible forms of discrimination on the basis of group "membership". One can suggest, for example, that those with IQ scores below 100 should become slaves to those with IQs over 100; or that we should be able to perform medical experiments on the severely retarded and brain-damaged humans, since they are less "valuable". In addition, no one can guarantee that future research will not find empirical evidence for the genetic inferiority of blacks or women. Singer

then goes on to ask whether racism or sexism can be justified in a civilized society and what, then, is the key criterion for granting rights. According to Singer, it is not the ability to think, reason, or having self-awareness. The only relevant factor for possessing rights is the ability or the capacity for suffering and/or enjoyment, or happiness. By granting equal "rights" to animals, Singer does not mean to provide the exact same rights that humans hold (such as the right to vote or to drive a car), but rather equal consideration of interests. Since animals do not have any interest in voting or driving, it is irrelevant to discuss whether they should have the right to fulfill these activities. They do, however, have an interest in a life without suffering, wide living open spaces, accessible food and water, and living with other companions of the same species.

As noted before, Singer draws his arguments from the utilitarian school of thought. Utilitarianism is an ethical theory whose rule is: "Act in such a way as to maximize the expected satisfaction of interests in the world, equally considered" (Matheny, 2006:14). Therefore, we need to sum up evenly the interests of all the parties involved, without discriminating, and choose an action that will result in the greatest good for the greatest number. Singer and other utilitarian philosophers have argued that the universalistic principle of the utilitarian ethical doctrine - as it takes into considerations the interests of all those affected by an action, regardless of their traits or characteristics - is enough for choosing in favor of animal rights. However, it is the aggregative principle – the greatest good for the greatest number – that raised some concern in another leading animal rights' philosopher, Tom Regan.

Regan (1983) has severely criticized the reliance on utilitarianism in the case of animal rights. Although he accepts utilitarianism's principle of equality, he argues that this is not the type of equality an animal rights' advocate should have in mind. The main weak point in the utilitarian call for animal rights, according to Regan, is that it focuses on the interests or the

feelings of the animals, rather than on their inherent value. The consequences of that might be the justification of many of the practices used against animals in modern society. If, for example, we can prove that by conducting medical experiments on a few animals - in the course of which they will suffer a great deal of pain - we can save many humans (or even many animals), a utilitarian might conclude that it is moral to do so, since it has led to the best results for more individuals. Indeed, Singer (2006) acknowledged that, albeit in extreme circumstances only, it may be justified to use animals for human purposes. Therefore, Regan believed that only a rights-based theory, which grants an inherent value to animals, regardless their or other individuals' interests, will always ensure the ethical treatment of animals. Regan's animal-rights view protects individual animals' interests regardless the benefits that might be generated for the common good, thus granting unconditional rights to animals.

Regan's view was perceived to be much more extreme and uncompromising than Singer's utilitarian view, although the consequences in both cases were practically the same: the end of the use of animals as we know it today, and a fundamental change in the way we perceive animals. Indeed, as Degrazia (1999) stated, "utilitarianism and animal-rights views appear far more alike than different" (p. 112). Both positions see speciesism as being deplorable and call for adopting vegetarianism and eliminating animal research – at least most of it (Herzog, 1990).

Influences, Opposition and Rebuttals

The ideas of Singer and Regan, and other related animal rights writers who published opinion papers since that period (e.g., Harrison, 1964; Godlovitch, Godlovitch & Harris, 1971; Ryder, 1975) have given rise to a great deal of interest and have had a massive influence on many aspects of modern western societies. Numerous animal rights' movements were founded in

the last few decades, and their actions are clearly visible in various forms of persuasions (direct mail, speeches, information stands, etc.), demonstrations, boycotts, vegetarianism, lobbying, and more (Munro, 2005). The impact of these movements is also apparent in many countries' legislations that aim to ensure animal welfare - though excluding in many cases the treatment of farm and research animals (Druce & Lymbery, 2006; Tresl, 2002; Wise, 2000). Organizations like PETA, The National Antivivisection Society and the Humane Society, have worked tirelessly to raise public awareness about the fate of the animals used for human purposes. Due to the growing appeal of the animal rights movement, the term "speciesism" was coined and today it appears in many mainstream dictionaries. Dunayer (2003) goes even as far as suggesting that Standard English usages perpetuate speciesism.

However, as expected, counter reactions to the animal rights' ideology, and to its growing appeal, were not late to come. Because accepting the ideas of Singer, Regan, and others would require significant changes in the way society treats animals, many philosophers and scientists introduced theories which explain why animals, after all, do not have rights, and why humans are entitled to use them to serve their own purposes (e.g., Beauchamp, 1997; Carruthers, 1992; Cohen, 1997; Fox, 1978; Tefler, 2004). To support their views, these writers have raised various arguments, many of which are beyond the scope of this study. However, in general, their arguments include the claim that:

1. The notion of rights is essentially human and cannot be expanded to animals;
2. To have rights one must possess a sense of morality and/or be a member of a community;
3. Putting an end to the use of animals will have destructive consequences for humanity; and
4. Animals kill other species too, therefore it is within the "natural order" of things.

Singer (2002), Regan (2001) and their supporters' reply to these arguments was that, drawing a moral line between human and animals, i.e. speciesism, is just another form of discrimination. They accepted the fact that in some cases using animals in research, for example, can potentially improve human lives. However, since society refuses to experiment on severely retarded or brain damaged people, who might have even lower mental capability and self-awareness than most animals, it will also have to do without animal experiments. Animal liberationists claim that in most cases the use of animals is for trivial and insignificant purposes and therefore most of the pain inflicted on animals can be abolished without severe consequences for humans. For example, adopting a vegetarian lifestyle for ethical reasons has increased in popularity in recent years without causing health problems to the vegetarians (Shani & DiPietro, 2007).

However, the growing appeal of the animal rights' philosophy has not been translated into major changes in the way humans treat animals on a daily basis; rather, it has resulted in a greater awareness and more focus on the welfare of animals. While supporters of animal rights' ethics, also called *animal liberators*, which are still in a clear minority, reject any act which could adversely affect the welfare of a single animal, supporters of the *animal welfare* position, also called *reformers* (Herzog, 1990), accept that some animal suffering may be justifiably incurred if the benefits to human welfare - or the welfare of all animal species - outweigh the costs (i.e. pain and suffering) to the single animals. They accept the use of animals but want to eliminate as much suffering as possible. While there are a few definitions of animal welfare, Blandford, Bureau, Fulponi & Henson (2002) state that it is now widely accepted that while animals can be used for the benefit of humans, such use carries five main obligations. These are

the provision of essential food, water and shelter, health care and maintenance, the alleviation of pain and suffering, and the ability to enjoy minimal movement.

Evidence of the influence of the animal welfare approach can be seen in many aspects of life (Shani & Pizam, 2008). To name a few examples, as reported by Singer (2002), the battery cage system of producing eggs, known for its inhumane crowdedness, was outlawed in Switzerland. In addition, the European Union has agreed to phase out the standard bare wire cage altogether, and required egg producers to enlarge the cages the chickens are held in. Even outside Europe there is progress in this direction, albeit a much slower one. For example, the Israeli Supreme Court has recently outlawed the fattening of geese in farms, arguing that it violates the laws for the prevention of cruelty to animals. However, despite these developments the animal rights' debate continues to raise troubling questions, from both sides of the barricade. The importance of the animal ethics debate also requires a close assessment of people's attitudes toward the treatment of animals.

Attitudes in Relation to the Treatment of Animals

In recent years, many efforts have been directed towards establishing the relatively new field of anthrozoology, i.e. the study of relations between people and animals. As part of the development of this study field, *The International Society for Anthrozoology* (ISAZ) was established in 1991, followed by the launching of the *Anthrozoös* and *Society and Animals* academic journals, which are dedicated solely to investigating human-animal relations. Anthrozoology encompasses many fields of research, and draws from a broad range of disciplines: psychology, psychiatry, political science, cardiology, behavioral science and more

(Schneider, 2005). However, the main focus of anthrozoologist studies is to examine human attitudes toward animals.

One notable attempt to describe people's attitudes toward animals was undertaken by Kellert (1985, 1991). In his typology (see Table 1) Kellert portrayed eight basic wildlife values which characterize a person to various degrees (high or low). A person can, for example, score high on the humanistic value, in the sense of loving and caring for pets, and at the same time score low on moralistic value and high on utilitarian value, in the sense of being in favor of animal experiments and rearing animals for food. Another person might score high on the ecologist value, in his/her supporting of conservation efforts, but also score low on moralistic value, since he/she accepts the use of hunting and fishing as tools for managing wildlife. There are several reasons for the growing interest of researchers in the public's attitudes toward animals.

First, animals today are tightly incorporated in people's life, especially as companion animals, which lead to efforts to investigate the influence of companion animals on the individual, on the families and on society as a whole. Multiple studies have found that a very high percentage of families in Western society have companion animals which, in many cases are considered to be almost like full family members, as they have a positive influence on the family relations and its happiness, and provide comfort and companionship (e.g., Albert & Bulcroft, 1988; Cain, 1985; Cohen, 2002).

The second reason is the premise of the close link between caring for animals and caring for people. In an early study, Ray (1982) found no support for the hypothesis of a significant correlation between attitudes toward animals and attitudes toward people. However, more recent evidence shows growing support for the idea that human attitudes towards animals may be

Table 1
Basic Animal Values

Term	Meaning
Humanistic	Interest and strong affection for individual animals, particularly companion animals
Moralistic	Concern for the right and wrong treatment of animals, with strong opposition to exploitation and cruelty toward animals
Utilitarian.	Concern for the practical and material value of animals or their habitats
Negativistic	Avoidance of animals due to indifference, dislike or fear
Dominionistic	Interest in the mastery and control of animals, typically in sporting situations
Naturalistic	Interest and affection for wildlife and the outdoors
Ecologistic	Concern for the environment as a system, for interrelationships between wildlife and natural habitats
Scientific	Interest in the physical attributes and biological functioning of animals
Esthetic	Interest in the artistic and symbolic characteristics of animals

Source: Kellert 1985, 1991.

indicative of human-human empathy (Ascione, 2001; Taylor & Signal, 2005; Wuensch, Jenkins & Poteat, 2002). In this regard, it was also suggested that children's attitudes and behavior towards animals are important and might predict future involvement in a variety of delinquent behavior (Bowd, 1982; Henry, 2004). These findings clearly derive from a utilitarian perspective, i.e. examining the benefits of animals to humans, and have important implications for the fields of psychology and education.

The third reason is the growing efforts in Western society towards conservation and preservation have also led to the need to investigate the attitudes of the public at large towards

animals. As noted by Peyton and Langenau Jr. (1985), wildlife professionals find it difficult to make management decisions without knowing what is acceptable by the public, in general, and by local residents, in particular. This is especially important in light of their findings that wildlife biologists had a different profile of attitudes towards animal resources, and they often conflict with the general public on their choice of priorities about various issues. It is especially important for wildlife managers to consider public opinion in areas where endangered carnivore species may inflict danger upon people, their companions and/or their companion animals (Naughton-Treves, Grossberg & Treves, 2003).

The fourth reason is the growing concern for the way animals are treated in society, especially in scientific laboratories and industrial farms. In this regard, the need to develop tools to examine the public's attitudes has been widely recognized. Among the various instruments developed in recent years are the AAS - Animal Attitude Scale (Herzog, Betchart & Pittman, 1991); SATA - The Scale of Attitudes toward the Treatment of Animals (Bowd, 1984); and ATTAS - Attitudes Toward the Treatment of Animals Scale (Henry, 2004). These scales are general, in the sense that they aim to cover all the areas in which animals are used in society, i.e. wildlife, hunting and fishing, food, clothing, laboratory research and entertainment. It should be noted, however, that the latter has received relatively little attention. The development of these scales was followed by an extensive attempt to track socio-demographic characteristics for different attitudes toward animals. In this regard, the most consistent and substantial evidence are the clear differences between men and women. Women were overwhelmingly found to have higher levels of positive behaviors and attitudes toward animals (Herzog, 2007), which resulted in a greater concern for animal welfare (Herzog et al., 1991), higher objection to animal research, a greater willingness to participate in animal protection activities (Eldridge & Gluck, 1996), less

involvement in animal cruelty acts (Henry, 2004), and more chances of adopting vegetarianism (Beardsworth, Bryman, Keil, Goode, Haslam & Lancashire, 2002). In addition, men are more likely to participate in activities involving the consumption of animals, such as hunting and fishing (Kellert & Berry, 1987).

More differences in attitudes toward animals based on socio-demographic characteristics were found, based on age, level of education, occupation, and place of residence. Based on national surveys in the U.S., Kellert (1978, 1980, 1996) found the greatest *moralistic* attitude (see Table 1) among the highly educated, students and clerical workers, participants under the age of 35, and Western states residents. On the other hand, the least moralistic attitude was expressed by participants from Southern U.S. states, by rural residents, and farmers. Another important consistent finding was the significantly lower concern and affection for animals among non-whites.

Other studies aim to explore cultural differences regarding attitudes towards animals. For example, Al-Fayez, Awasalla, Templer and Arikawa (2003) found less positive attitudes among Kuwaiti compared to American adolescents, a finding explained by the relatively unfavorable views of companion animals in Muslim countries. In another study, significant differences were found between Americans and Japanese, where the latter were found to be less respectful towards the ecologic system and towards wildlife (Kellert, 1991). Religion was also found to influence the way people view animals, with persons holding more liberal theological views were found to have a more positive attitude toward animals (Bowd & Bowd, 1989). It was also found that personal moral philosophy is related to how individual feels animals should be treated, with idealists being more likely than relativists to engage in animal rights' activism (Galvin & Herzog, 1992).

A major factor that was found to constantly influence people's attitudes towards animals was the species of the animal. Various studies clearly indicate that there are popular and unpopular animals, the former being mostly large mammals, especially primates and companion animals, while the latter include non-mammalian species, such as biting invertebrates, which include mosquitoes, snakes and spiders (e.g., Bjerke, Odegardstuen & Kaltenborn, 1998; Kellert, 1993; Phillips & McCulloch, 2005). Plous (1993) termed the tendency to grant different moral consideration to different species as the "hierarchy of privilege". Researchers suggest that the attitudes towards the use of animals, such as animal experiments or rearing animals for food, relate to people's beliefs with respect to animal suffering and in the animal mind – whether or not they feel pain and/or possess mental ability - and the degree of similarity between the animals and humans (Plous, 1993; Herzog & Galvin, 1997; Knight, Nunkoosing, Vrij & Cherryman, 2003). Plous (1993) termed the latter "the similarity effect", whereby people give higher moral consideration to species which are perceived as being similar to them.

Another important factor is people's perception of whether certain uses of animals are truly necessary. For example, while the vast majority of the public supports medical and scientific research involving animals, product-testing research is much less acceptable (Driscoll, 1995). Knight *et al.* (2003) found in this regard that the perceived variety of existing alternatives represents one of the key reasons for people to support or object the use of animals for product testing. This leads us to the controversial issue of the use of animals in tourism and entertainment, which is perceived by many critics as unjustified, while others passionately advocate it.

Animal Use in the Entertainment & Tourism Industries

The issue of animal use in entertainment and tourism has received only minimal attention in the animal rights writings. In surveys conducted among animal rights activists, the issue of animals used in sports or entertainment was ranked only as the fifth most important issue on which the animal rights' movement should focus (Plous, 1993). The relative inattention to the issue of animals used in entertainment and tourism is quite perplexing and can be understood as a missed opportunity for promoting the case of the animal rights'.

Since using animals for entertainment and tourism purposes is admittedly not a matter of critical necessity for either humans or animals one could have easily argued that animal-based attractions are a trivial and non essential activity that serves no other purpose than entertaining visitors. This is in total contrast to the needs of using animals for nutrition and medical experiments, where human survival or well-being might be at stake.

Hence, the two following questions emerge from the above argument:

(1) Can animal-based attractions be ethically justified, and,

(2) What are the public's attitudes toward animal-based attractions?

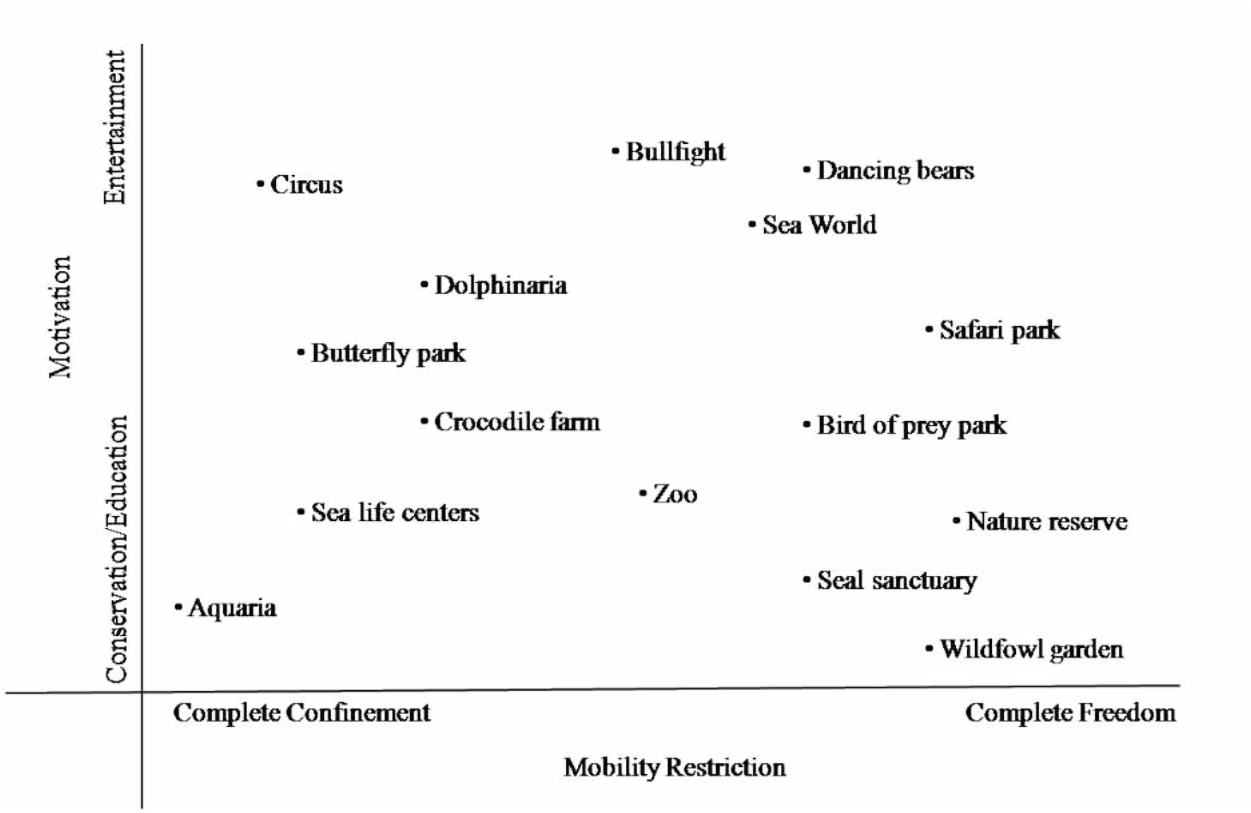
Animal Ethics in Entertainment

Animals are used for entertainment purposes in various ways, some of which may have significant ethical consequences. As noted earlier, in addition to observing wildlife in their natural environment, animals can be viewed for entertainment purposes in captive settings. A basic definition of "captivity" is provided by the U.S. Code of Federal Regulations:

> "Captivity means that living wildlife is held in a controlled environment that is intensively manipulated by man for the purpose of producing wildlife of the selected species, and that has boundaries designed to prevent animal, eggs or gametes of the selected species from entering or leaving the controlled environment. General characteristics of captivity may include but are not limited to artificial housing, waste removal, health care, protection from predators, and artificially supplied food" (United States Government, 2008).

Although this definition applies to all animal attractions involving captivity, the range of such sites is very broad. As noted earlier in relation to captivity, Orams (1996, 2002) differentiates between fully-captive attractions, such as zoos, theme parks, aquariums, and oceanariums, and semi-captive attractions, such as wildlife parks and dolphin pens. Shackley (1996) also offered a classification of animal-based attractions in captivity settings, based on the animals' "mobility restriction" (ranging from "complete confinement" to "complete freedom"), and on the motivation to operate the attractions (ranging from "conservation/education" to "entertainment") (see Figure 2).

However, the accuracy and usefulness of this typology are questionable. First of all, it is difficult to measure the level of "freedom" the animals enjoy, as this term and its meaning are very vague and contentious (see Bostock's discussion [1993] in this regard). Secondly, even in a single attraction the animal displays are not homogenous, and include a wide variety of exhibits, which can be distinguished based on different criteria, such as mobility restriction or the purpose factors described by Shackley (1996). Animal exhibits can be differentiated based on other factors. For example, in some exhibits the captivity can be signaled by iron bars (as was common in the traditional zoos), while in other exhibits more modern practices are used, such as



Source: Shackley (1996)

Figure 2: Shackley's classification of tourist attractions displaying animals in captivity

invisible barriers, sunken enclosures or enclosures surrounded with moats (Shelton & Tucker, 2007). The diversification within the attractions requires paying more attention to the nature of the wildlife exhibits themselves, rather than to the attractions as a whole. Nevertheless, both captive and semi-captive sites give rise to relatively similar ethical concerns and criticism.

To address these ethical concerns advocates of animal-based attractions are faced with the critical need to justify their existence The reasons that are commonly cited for keeping animals in zoos are amusement, education, scientific research, and species preservation

(Jamieson, 2006). See Table 2 for a summary of arguments in favor of and against animal-based attractions.

First, ***amusement*** has always played a central role in the establishment and operation of zoos. While many animal-based attractions claim there are other motives for their existence (see below), their efforts to cater to the visitors' needs, and consequently to remain profitable, is clearly noticeable (Ryan & Saward, 2004). It should also be noted that zoos are perceived as family-oriented recreational sites, thus children are a central factor in the operation of zoos (Turley, 2001). Consequently, the vital necessity to appeal to children puts pressure on many attractions to use various means of entertainment, such as close encounters with the animals, circus-like shows, and animal shows such as alligators or bear wrestling. However, while one may see value in the family and recreational role of animal-based attractions, considering the animal rights advocates' point of view, there is a need for more altruistic reasons for removing animals from the natural habitat and holding them in captivity.

The second rationalization for having zoos is their role in ***education***. In the 21st century most zoos position themselves as more educational rather than entertainment attractions (Mason, 2000). The educational mission of zoos might include improving people's understanding of wildlife and increasing public awareness of the environment and its fragility (Turley, 1999). To achieve this many animal-based attractions present biological characteristics and facts about the animals and encourage visitors to support environmental initiatives. Fraser et al. (2007) also argue that "the social experience of zoo-going offers one of the few venues for families…to explore and establish a relationship to the natural world; in the face of the biodiversity crisis, zoos may offer these families a place to renegotiate their relationship to an unseen but desirable wild nature…" (p. 282). Thus, the exhibited animals in zoos can be seen as "animal

ambassadors", representing the wild counterparts, thereby enabling visitors to connect with the natural world and understand it better.

To counter education-related arguments the oppositionists to zoos question the zoos' success in educating visitors, and suggest that even if zoos do increase knowledge, this is not the desired type of knowledge that the public should obtain (Jamieson, 2006). Although some zoos try to provide the animals with their natural environment, as much as possible, Wickins-Dražilová (2006) argues that there are many conditions zoos cannot easily simulate, such as climate, migration, and hunting. In addition, the zoo environment, the confinement, and the proximity to humans might create stress among the animals, which will distort their natural behavior even further. The consequences are usually the abnormal and stereotypical behavior of the animals. Stereotypical behavior is repetitive and useless function, like pacing, head rolling or excessive licking. It usually derives from the animals' frustration at their inability to behave naturally within their enclosure (Shyne, 2006). Therefore, an important argument against the role of zoos in education is that, even if visitors seriously observe and learn about the animals, their perception is out of the natural context and results in a twisted perception of wildlife and their behavior.

Zoos also claimed to have an important role in ***scientific research***. Some scientists (Hutchins, Dresser and Wemmer, 1995) argued that the knowledge produced by research in zoos is extremely valuable, and contributes to fields such as animal behavior, nutrition, reproduction, genetics, pathology and clinical veterinary medicine. In addition, the researchers claim that animals, both in the wild and in captivity, enjoy the fruit of research conducted in zoos. The latter benefit from improved conditions and treatment and the former benefit from better conservation and environmental plans that stems from the growing understanding of their

characteristics and needs, through their observation in captivity. Indeed, in a recent article in *Time* magazine, Sayre (2007) reported on a significant progress in veterinary care for both wildlife and domestic animals, especially in an area of medicine that was, until now, exclusively reserved for humans – prostheses. It is mainly thanks to research conducted in zoos and animal preservations that veterinary surgeons are now able to implant quality prostheses into injured animals, who were so far condemned to suffer or die. Consequently, we can now see a dolphin with a prosthetic tail, an elephant with a prosthetic leg and a stork with a prosthetic beak, all of them functioning very much like healthy animals.

However, Jamieson (2006) rejects the arguments in favor of the role of zoos in research. Regarding the improvement in the health of the animals and the conditions in zoos, he contends that "If there were no zoos, there would be no need to improve them" (p.137). But his main point is that in reality, very few zoos actually engage in research. Thus, even if there are a few good zoos that significantly contribute to knowledge, the vast majority of zoos are morally unjustified. However, many researchers disagree with his claims, and report on an increasing number of scientific studies conducted in zoos (e.g., Stoinski, Lukas & Maple, 1998; Kleiman, 1992).

The final argument in favor of zoos, its role in ***conservation***, is perhaps the most unanimously accepted. There is almost no disagreement with the fact that thanks to preservation programs of endangered species, many of them still exist. Snyder *et al*. (1996) mention birds, such as the California condor, the Mauritius kestrel and the black-footed ferret, and mammals like the Guam Rail and the Père David's Deer, as species that were saved as a result of captive breeding. Nevertheless, the success of reintroducing endangered species back into the wild is much less impressive and many of them still remain in captivity (Catibog-Sinha, 2008). The acknowledged success of breeding programs in zoos has not made much of an impression on

animal rights' activists. They are clearly far more concerned with the welfare of the individual animals, which might be harmed in captivity, rather than caring for the survival of endangered species. Indeed, the president of PETA, Ingrid Newkirk (2007), was cited in the *New Scientist* magazine as saying "Species come and go, with or without our intervention" (p. 21). Jamieson (2006) also doubted whether after a few years in captivity, a species is able to preserve its unique biological and behavioral characteristics, thus rendering the conservation activity far less worthy.

As noted before, animal rights' philosophers have devoted limited attention to ethical questions that arise from keeping animals in animal-based attractions. However, after reviewing the arguments in favor of and against zoos, we can safely conclude that animal-based attractions often clash with most of the contemporary theories on the rights of animals. Peter Singer hardly referred to the issue of the use of animals for entertainment purposes, but put forward some arguments that may help understand his point of view regarding this issue. When referring to another issue, Singer argued that "Judging by our past record, any attempt to change ecological systems on a large scale is going to do far more harm than good…we cannot and should not try to police all nature" (Singer, 2002: 226), making him likely to reject the usefulness of zoos in science and conservation. In line with his utilitarian approach, he is also likely to reject the role of amusement, since it is a trivial human need. Lastly, in his writings Singer (1975, 2002) has expressed resentment to the clear preferred sympathy and admiration which many humans feel towards charismatic, "cuddly" or "cute" species (that are the vast majority in zoos) over the "simple" and neglected ones, such as the billions of farm animals around the world. Regan (1995), in one of his rare references to zoos, again expressed concern with the consequences of adopting the utilitarian doctrine. It is extremely hard, he claimed, to follow the aggregative principle of utilitarianism since we must take into account the interests of the animals, operators,

Table 2
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.

employees, visitors, local communities, and of the ecosystem, as whole. These interests may be - and often are - complex and contradictory, and by taking them all into consideration, we just do not know whether or not zoos are morally defensible. Therefore, Regan (1995) argued that in the case of zoos also, only a rights-based approach which grants animals an intrinsic value will

always reject the existence of zoos, since they violate the right of the animals to be treated with respect, i.e. of enjoying freedom.

Another important theory which was mentioned in the previous section also raises serious ethical questions in relation to animal-based attractions. The tourism industry has always made significant use of Great Apes (such as gorillas and chimpanzees) and of marine mammals (such as orcas and dolphins). The concept of *personhood* of non-human animals, which is especially relevant to these species, has led many researchers to demand their immediate release from captivity (Cavalieri & Singer, 1993; Degrazia, 2006). Although the main implication is putting a halt to the use of animals as research subjects in laboratories, there are clear implications for tourist attractions as well.

However, although animal rights' theories have had a growing influence in the past few decades, they are definitely not the mainstream. Instead of adopting uncompromised points of view, as do Singer and Regan, many researchers and practitioners accept the existence of zoos, but demand improvements in the living conditions of the animals, and thus take on an *animal welfare* approach (e.g., Eaton, 1998; Lindburg, 1999). Indeed, zoos have changed radically in the past one hundred years, moving from the presentation of animals in small cages to natural-design surroundings. Catibog-Sinha (2008) describes certain actions taken by leading animal-based attractions to address animal welfare concerns:

(1) Creating miniaturized ecosystems that imitate the natural habitats of the exhibited wildlife

(2) Providing more dynamic and spacious roaming area for the animals

(3) Setting up and maintaining strict animal care policies, which refer to issues such as nutrition, sanitation, disease control, transport and handling

(4) Providing the adequate social environment for the wildlife, especially regarding group size and age-sex composition, and

(5) Sustaining animal management ethics.

Regarding the first two welfare principles, an important concept that is prevalently used by modern animal-based attractions is the integration of environmental enrichment into the design of wildlife displays (Markowitz, 1982; Mellen & MacPhee, 2001). Davey (2007b) defined environmental (or behavioral) enrichment as "an animal husbandry principle that aims to improve welfare provision for captive animals by increasing the behavioral choices available in order to encourage natural behavior and breeding" (p. 367). He further stated that it includes the incorporation of both natural elements – or "exhibit naturalism" (e.g., rocks, vegetation and water features) - and artificial objects, that stimulate species-specific behavior (e.g., toys, scents and sounds). One of the declared objectives of this approach is "to improve the psychological and physiological well-being of captive animals by providing environmental stimuli that help meet the animals' behavioral and psychological needs" (Ben-Ari, 2001: 172). It is also argued that in many cases animal training can provide opportunities for behavioral enrichment – it is claimed that many animals enjoy their training and performance, although this matter is far more controversial (Ben-Ari, 2001; Coe, 1997; Shackley, 1996).

It should be noted, nevertheless, that there is evidence that in many zoos (mostly in Third World countries – but in other parts of the world, as well) the animals are kept in distressing conditions, are poorly fed, and that they are simply held for entertainment and amusement purposes, without taking their welfare into consideration (Agaramoorthy, 2004; Mason 2000). The animal welfare orientation, which is associated with most modern animal-based attractions, has less effect on more controversial types of use of animals for entertainment purposes, such as

bullfighting, cockfighting and bear-baiting, which are still prevalent in certain parts of the world (e.g., Bailey, 2007; Cobb, 2003). For example, circuses - a prominent tourist attraction that relies heavily on animals - are still under heavy criticism for abusing animals. Arguments against cruelty towards animals in circuses essentially revolve around the fact that they are locked up in small cages, trained in techniques that involve suffering, and subjected to unnaturally frequent transport, as the circus moves from one place to another (Carmeli, 2002; Jordan, 2005). According to *People for the Ethical Treatment of Animals* organization (PETA, 2006), animals in circuses are forced to travel thousands of miles for 48 to 50 weeks every year in very poor conditions. For example, tigers live and are transported in cages only 4 x 5 x 6 feet – barely enough for them to stand up and turn around. In addition, circus animals perform "tricks" under threat of punishment, such as bears that commonly have their paws burned to force them to stand on their hind legs (Cataldi, 2002).

Yet the popularity of circuses and other animal shows seems to have decreased in recent times (Shackley, 2006). Evidence as to the influence of the animal rights movement is also found in the growing popularity of animal-free circuses, which completely avoid the use of animals and feature only skilled human performers, such as jugglers, clowns, acrobats, dancers and musicians. More than 25 animal-free circuses operate in North America alone (http://www.circuses.com). As reported earlier, a growing number of animal-based tourist attractions which operate in captive settings are showing growing concern for animal welfare, although in many cases, it is in response to public pressure. As noted by Cataldi (2002), although animals in zoos, wildlife parks, and other animal-based tourist attractions have been deprived of their freedom, they are sometimes kept in atmospheres that encourage respect toward them, in which their welfare and dignity are likely to remain intact. Yet, after reviewing the ethical debate

- mostly academic - around the use of animals in tourist attractions, there is still a need for a close examination of people's attitudes in relation to this contentious issue.

People's Attitudes towards the Use of Animals in Tourism Attractions

As noted before, tourism and entertainment were not at the heart of the inquiry into the public's attitudes toward animals, although researchers have considered this issue to some degree. For example, the Animal Attitude Scale (AAS), a widely used questionnaire, contains four items out of twenty that relate directly to tourism and entertainment (Herzog et.al., 1991):

1. It is morally wrong to hunt wild animals just for the sport.
2. There should be extremely stiff penalties including jail sentences for people who participate in cockfighting
3. I sometimes get upset when I see wild animals in cages in zoos
4. The use of animals in rodeos and circuses is cruel

However, researchers usually use the average score of the AAS (and other similar scales), as an indicator of general positive or negative attitudes towards animals, without granting special consideration to entertainment-related issues (e.g., Taylor & Signal, 2004, 2005; Herzog, 2007; Herzog et al., 1991; Bowd & Bowd, 1989; Signal & Taylor, 2006). In addition, the items in these scales do not represent the wide spectrum of the ways animals are used in tourism and entertainment. Clearly, in light of the massive use of animals in entertainment, and the ethical problems surrounding the issue, there is need for a more specific instrument which will cover the complex use of animals in entertainment.

Exploring the attitudes toward animal-based attractions has recently started to get some attention from tourism and hospitality researchers, although often without relating to the entire spectrum of ethical questions involved. However, useful initial indications of the way visitors

and non-visitors perceive animal-based attractions are already found in the literature. Turley (1998) and Ryan and Saward (2004) found that despite new management philosophies, which embrace education, research and conservation, as described below, visitors still mainly appreciate the zoo as a recreational tourist attraction. Turley (1998) added that in her research in the U.K "not one visiting respondent denied that having a pleasurable day out was an important in influencing the decision to visit (a zoo)" (pp. 348). In addition, the zoo is perceived mostly as a family-oriented recreational site, mostly appropriate for children, who often need more entertaining activities while visiting a zoo, such as a petting zoo, etc. (Benkenstein, Yavas & Forberger, 2003; Turley, 2001).

Nevertheless, Turley (1998, 2001) found that when children are accompanied to the zoo, their parents are much more likely to attribute importance to the educational aspects of the zoo. In addition, the roles of zoos in education and conservation are perceived by visitors as central to their operation, and coincide with relaxation and serving as venues for family outings (Davey, 2007b; Mason, 2007; Mowen & Graefe, 2006). However, the educational component in zoos was not found to be the primary reason for visiting them, as was argued by other researchers (Hayward & Rothenberg, 2004; Kellert & Dunlap, 1989; Stoinski, Allen, Bloosmith, Forthman & Maple, 2002). Note that in Turley's study (1998), conservation was only ranked third among the reasons for visiting a zoo, and there are some indications that the latter is not likely to increase the knowledge about and awareness of conservation and environmental issues among visitors (Jiang et al, 2007; Moscardo, 2007). Based on his longitudinal research, Kellert (1996) concluded that "the typical zoo visitor possesses limited knowledge and appreciation of wildlife" (p. 87). However, these findings are not consistent with all studies carried out in zoos (e.g., Lukas & Ross, 2005; Smith & Broad, 2007). Benkenstein et al. (2003), therefore, recommend

improving the delivery of educational services, for example in the provision and display of information about the species. Based on extensive studies conducted on the issue in zoos around the world, Woods (1998) also offered a set of principles for displaying animals in captive attractions, for the purpose of encouraging learning among visitors and increasing their knowledge and awareness of educational and conservational messages (See Table 3).

Despite the strong importance of the recreational component visitors attribute to zoos, there is some evidence that the public do care to some extent about the visual representation of animals and about their well-being. In an early experimental-designed study, Rhoads and Glodsworthy (1979) showed students slides of animals in natural and semi-natural settings and zoos. The results indicate that animals in zoos were seen as less dignified, as confined, unhappy, unnatural, tame and dependent, compared to animals in semi-natural and natural settings. Indeed, Hughes, Newsome and Macbeth (2005) argue that what visitors find to be entertaining has changed over time, with a shift from circus-type presentations to more naturalistic presentations of animals, with captive wildlife occurring in spacious areas, in contrived "natural" environment (see also Tomas, Scott & Crompton, 2002).

In a recent study conducted among Chinese zoo visitors, it was found that the participants spent more time in natural-design exhibits, compared to traditional exhibits (e.g., cages). Therefore, Davey (2007b) concluded that the international trend in zoos of improving animal welfare through environmental enrichments is valuable (in addition to ensuring the animals' well-being) for creating more acceptable, pleasant and interesting zoo visit experiences. Indeed, McPhee, Foster, Sevenich and Saunders (1998) found that zoo visitors recognized the goals of behavioral enrichment and its importance for the animals' well-being. Ryan and Saward (2004) also showed that the friendly design of zoos contribute to the visitors' enjoyment of the visit,

although it was found that visitors still attribute more importance to getting a close look at the animals than to the latter's right to 'private places'. Despite these contributions to our knowledge about people's attitudes towards animals in entertainment, they are primarily based on specific case studies and anecdotes, and do not offer a holistic view on what constructs their attitudes, and what the major influencing factors are. In addition, the research settings in these and other related studies are typically conventional zoos, while they neglect other attractions where captive animals are viewed (such theme parks, bullfights, and sport contests).

One major contemporary contribution towards a holistic understanding of human-animal interaction in the tourism context was brought by Curtin (2006) and Curtin and Wilkes (2007), who conducted in-depth interviews with people who swam with dolphins, both in captivity and in the wild. Undoubtedly, swimming with dolphins was reported by the participants in both groups as a powerful, meaningful and emotional experience. However, those who swam with the dolphins in the wild demonstrated a greater ethical sensitivity towards keeping dolphins in captivity. Those who swam with captive dolphins, on the other hand, demonstrated a cognitive dissonance. As noted by Curtin (2006), "all had concerns regarding captivity, yet they tried to reduce this concern by accentuating the positives and denying the negatives" (p. 312). The swimmers found comfort in the fact that captivity is the only setting they could swim in with dolphins, although they would rather swim with them in the wild. In addition, they were convinced that the dolphins and their trainers love each other and that the shows they watched where different from circus shows. Curtin and Wilkes (2007) also found that the themes of education, research and conservation help cover up the fact that the dolphins are exhibited for profit, thereby allowing the swimmers to develop less feelings of guilt, often associated with the activity. To conclude, the swimmers with captive dolphins did feel ethical concerns, yet the

Table 3
Principles for Interpreting Captive Wildlife

Principle	Description	Educational Purpose
Accurately representing nature		
Being natural	Simulating the natural habitat of the exhibited animals as realistically as possible (removal of perceptual cues, such as visible barriers, etc.).	Creating 'landscape immersion': provides the visitors with the illusion that they are in not in a zoo, but experiencing the animals in the wild.
Being accurate	The animals' enclosures should represent accurately the natural habitat of the exhibited animals (not just give the impression of "nature").	Accurate enclosures encourage animals to engage in behavior that is typical to the species, which results in a better appreciation of the animals by the visitors.
Encouraging natural behavior	Designing enclosures that allow the animals to express behavior that is typical to their species.	Allowing the visitors to witness behavior that is typical to the species, as well as the abilities of the exhibited wildlife.
Using the sounds of nature	Integrating ecologically relevant sounds for each animal exhibited.	Assisting with 'landscape immersion', encouraging positive attitudes toward the animals, and stimulating the interest of the visitors in educational information.
Getting attention	Variables that were found to significantly attract the visitors' attention include enclosure size, animal motion, rare/colorful/endangered/ infant animals, visibility and proximity of exhibits, and interactive factors (e.g., touch the animals).	Increasing the amount of time visitors can spend observing the animal exhibits, thereby positively affecting the awareness and the knowledge of the visitors.

Principle	Description	Educational Purpose
Avoiding incorrect perceptions		
Anthropomorphism	To avoid the association of the exhibited animals with human characteristics (such as avoiding the use of pet names).	Understanding and appreciating zoos animals as wild animals, rather than domesticated animals, which encourages conservation messages.
Issues of rank	Considering the perceptual position of the exhibited animals in relation to the visitors (animals should not be looked down upon).	Encouraging the desire of the visitors to learn about the animals and to develop an attitude of respect toward them.
Captive behaviors	Reducing expressions of stereotypical captive behavior among animals (such as pacing, swaying, and aggression). Alternatively, providing explanations to the visitors about unnatural behavior and its antecedents.	Preventing misleading perceptions on wildlife behavior.
Providing high quality interpretation		
Signs	Providing effective signs and labels in the exhibits.	Without the proper interpretation and information the educational benefits from the visit are significantly reduced.
Live interpreter, interactives and shows	Offering interactions with animals, combined with explanations and presentations by zoo-keepers.	Satisfying the curiosity of visitors and their desire to learn. Keepers' talks also have the potential to improve positive attitudes.

Source: Woods (1998)

desire to participate in the experience led them to use cognitive and emotional techniques in order to reduce this cognitive dissonance. However, these studies focused only on the special segment of swimming with dolphins. Clearly, there is a need for a more holistic approach to explore tourists' attitudes toward animal-based attractions.

Previous Exploratory Study

As was broadly discussed in the previous sections, investigating people's ethical perceptions about the use of animals for entertainment, in general, and about animal-based attractions, in particular, has not, to this day, been the focus of studies on animal ethics. As a result, the way people evaluate and perceive these attractions remains to a large extent unknown. Because of the exploratory nature of the problem, a qualitative research design was chosen by Shani and Pizam (Forthcoming) for the purpose of exploring the full range of views on the subject, and to develop the range of issues to be investigated in future research (see Peterson, 1994). Specifically, the study used focus group discussions as the method of data collection. Hereinafter the study will be broadly detailed, as it constitutes a central foundation in developing the theoretical framework and the survey instrument to be used in the current research

Rationale and Background

A focus group is defined as "a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research" (Powell, Single, & Lloyd, 1996, p. 499). As noted by Weeden (2005), the aim of focus groups is to use group integrations to gain rich and insightful data about a topic of interest that would be less accessible by using some other qualitative method. A focus group method was

chosen for this study, rather than one-to-one interviews, since it is likely that many participants would not have reflected deeply on the topic of ethical aspects of animal-based attractions beforehand and may, therefore, feel reluctant to be interviewed. As noted by Marshall and Rossman (2006), in such cases, the focus group setting is more likely to get the participants to express their views, as the encounters take place within a supportive environment. In addition, focus groups, as a more socially-oriented method, enable the researchers to study the participants in a more natural and relaxed atmosphere. Focus group research usually include six to ten participants in each session (Glesne, 2006), which lasts not longer than two hours (Weeden, 2005).

Although they are clearly gaining increasing popularity in social science research, focus groups also have their weaknesses. Becken (2007, p. 353) mentions that "focus groups do not represent natural discussions, and the viewpoints presented by participants are verbal self-reporting (i.e. hypothetical); hence real behavior can only be inferred from participants' statements". In addition, there is a constant concern that the presence of other people will influence the responses of certain participants, which might lead to social willfulness or a hesitation to speak (Stewart, Shamdasani & Rook, 2007). However, when the purpose of a study is to develop a wide range of views and attitudes, as in the current study, this represents a minor problem (Peterson, 1994). Lastly, valuable time can be lost due to loss of control of the conversation and irrelevant topics being discussed (Marshall & Rossman, 2006). However, a trained and experienced moderator can minimize these concerns and maximize the effectiveness of the sessions.

Sampling

In the exploratory study three focus groups were conducted with tourists in Orlando, Florida. All the participants were recruited from a hotel located in the main tourist street in the city. For the purpose of the study, a visitor was defined a person who stayed in the hotel, regardless of the distance traveled. In the hotel, the guests were approached according to the principle of purposive sampling (Barbour, 2001; Finn, Elliott-White, & Walton, 2000), which aims to reflect the diversity among the guests, in terms of origin, gender and age. Although for some purposes homogeneous groups are preferred, various researchers argue that heterogeneity is required in order to reveal diverse opinions and experiences, as participants explain their positions to the other members of the focus group (Gibbs, 1997; Hollander, 2004; McLafferty, 2004). Fifty dollars and a dinner certificate for two were offered as incentives. Both the first and the second focus group were composed of seven tourists each, while the third group included eight tourists, which resulted in a total of 22 participants (13 females and 9 males). The sample included 14 participants from the continental U.S. (from five different states), three from Puerto Rico, four from Britain, and one from Canada. Five participants were aged 20-29, four were aged 30-39, four were aged 40-49, and the remainder of the sample (nine participants) were aged 50 and above.

Procedure

At the beginning of the focus group sessions, the participants were told about the objectives of the study, and that they could leave the session at any moment, as was recommended by McLafferty (2004) and required by the Institutional Review Board (IRB) of the University of Central Florida. Based on the recommendation made by Glesne (2006), four main

questions guided the semi-structured focus groups. These questions were based on general themes that emerged from the literature; they were taken from the general views regarding animal-based attractions, and applied to more specific aspects of their operations. After introducing themselves (including age and origin), the participants were asked to discuss:

(1) Views and opinions regarding various animal-based attractions (e.g., traditional zoos theme parks with animals, safari parks, bullfighting and rodeos);

(2) Previous experiences with animal-based attractions;

(3) Views and opinions on the different types of activities in animal attractions (e.g., petting zoos, encounters with animals); and

(4) Views and opinions about different types of species in animal-based attractions.

In addition, follow-up questions were brought up if participants raised interesting points of view. Note that in an attempt to avoid socially desirable answers on behalf of the participants (as it is prevalent in ethics research [Randall & Fernandes, 1991]), the participants were not asked specific questions about their ethical attitudes toward animal-based attractions, but rather to freely express their views on the issue. Their attitudes toward such attractions, as well as the structure of these attitudes were deduced from the participants' accounts, based on the interpretation of researchers. During the sessions the moderators attempted to generate a discussion and to challenge the participants, and in all three focus groups a dynamic conversation ensued. Each focus group lasted approximately two hours, and the sessions were recorded and transcribed into MS Word format. To ensure the anonymity of the participants, all the focus groups tapes, once transcribed, were destroyed, and the participants are presented in this paper in pseudonyms.

Data Analysis

The transcripts were examined to identify a thematic framework of attitudes toward animal-based attractions. As noted by Fossey, Harvey, McDernott and Davidson (2002), a thematic analysis involves the process of classifying, categorizing and grouping text segments to create and then clarify the definitions and contents of themes, within the transcript. The end product of the thematic analysis "is a detailed index of data, which labels the data into manageable chunks for subsequent retrieval and exploration" (Pope, Ziebland, & Mays, 2000, p. 116). In keeping with these principles of thematic analysis, the prominent concepts and aspects of the participants' accounts were highlighted and then integrated to generate core themes that constitute the structure of the tourists' attitudes toward animal-based attractions. Note that typically the goal of qualitative thematic analysis is not to quantify data, but rather to explore the variety and structure of themes around the investigated phenomenon. The results are therefore not reported in relative frequencies, as this can be misleading (Pope et al., 2000).

Findings

The analysis of the focus groups revealed three major themes which emerged in the course of the sessions:

1. General justifications for having animal-based tourist attractions,
2. Driving forces responsible for ethical use of animals in tourist attractions, and
3. Conditions for the ethical operation of animal-based tourist attractions.

Most of the participants' comments related to these issues, although they were not asked directly about them. They were mentioned and described by participants as central factors in their ethical evaluation of animal-based tourist attractions.

First, the ethical attitudes towards animal-based tourist attractions were based on general arguments in favor of (or against) their existence. In order to develop a favorable ethical attitude towards animal attractions, one should be convinced of the validity of the ethical arguments in favor of their presence, in the first place. These arguments did not point toward a specific attraction, but rather served as an ideological basis for justifying the use of animals in entertainment ventures in general. Some of the justifications raised by participants have been discussed in the academic literature. These justifications that are both mentioned in the literature and by many of the focus group participants, included conservation, research and education (See Hutchins et al., 1995; Jamieson, 2006; Mason, 2000, 2007; Snyder et al. 1996). Yet, even in relation to these well-discussed issues, the participants had some interesting insights. The role of animal attractions in education, among others, was found especially relevant to children and to the development of their awareness towards nature, similar to the findings of Turley (1999, 2001). In addition, the attractions were also perceived as contributing towards softening the negative image of certain animals - because of their behavior in the wild and/or their negative characteristics.

However, the participants also raised justifications that, to this day, have been relatively little discussed. To many participants, the attractions served as a safe socio-economic alternative to authentic nature tours, which are often perceived as being expensive and dangerous (See Shackley, 1996, for a similar argument). They were also perceived as enabling "ordinary" people to participate in activities that are reserved exclusively to wealthy tourists or wildlife professionals, thus leading to a form of "social justice." Another important justification that emerged in the focus groups was the perception that the animals exhibited in the attractions are better off in captivity, where they are free of the fear of predators or of the need to search for

food. Finally, the attractions also created the impression among some participants that they act as another form of wildlife regulation, which is necessary for the safety and security of human society.

Although many of the participants in the study justified having animal-based tourist attractions in general, they also recognize that these are not always ethically operated, especially in historical context. The second layer which constitutes the ethical perception of animal-based tourist attractions includes driving forces which are believed to cause the attractions to treat the animals responsibly. The belief that contemporary animal-based tourist 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 major impact on the operation of the attractions - and the legal and enforcement system, which is trusted to supervise their operations. While the former creates a form of self-regulation - it is worthwhile being ethical since it prevents negative publicity - the later represents external regulation, which ensures ethical operation. The perception that both of these driving forces have a crucial impact on the attractions was significant in accounting for the participants' reduced ethical concerns with regards to the ways animals might be treated "backstage".

The last layer which determined the visitors' ethical attitudes towards animal-based tourist attractions is linked to their judgment of each specific attraction. The participants in this study clearly distinguished between ethical and unethical attractions, and provided useful indications of which conditions need to be fulfilled in order for an attraction to be considered ethical. The core conditions mentioned were the natural design of the animal displays and the perception that the animals perform natural behavior, factors that have already been addressed by many animal-based tourist attractions (e.g., Davey, 2006; Hughes et al., 2005; Tomas et al.,

2002). Among the other prominent conditions mentioned were: gentle training methods; the perception of a "fair chance" given to the animals in sport or contest situations; ensuring the safety of employees and visitors; and respectful behavior on the part of the visitors. The views expressed by the participants suggest that the existence of these factors, partially or completely, affects the chances of an animal-based attraction to be considered ethical.

The structure of the ethical perception of animal-based tourist attractions, as identified in this study seems hierarchic in nature. A person who rejects any justification for having these attractions, i.e. who favors the abolishment of all use of animals for entertainment, is expected to have a negative attitude towards an attraction even if it adopts an ethical and responsible treatment of the animals. On the other hand, even if the existence of animal attractions is accepted by a person, and he/she believes that contemporary attractions are controlled by both self- and by external regulations, there are still specific conditions that need to be fulfilled in order for this person to have a positive attitude toward each specific attraction.

To conclude, although the tourism industry relies heavily on the incorporation of animals in its attractions, to this date there have been no serious attempts to investigate the issue in a holistic way. Specifically, the ethical attitudes of the visitors and non-visitors towards these attractions were only ambiguous and speculative. In this exploratory study (Shani and Pizam, Forthcoming), it was found that an ethical approach towards animal-based tourist attractions is constructed along three main levels: general justifications for having these attractions, a belief in the driving forces for ethical behavior on behalf of the attractions, and certain conditions for the ethical operation of each specific attraction. This can be seen as an additional step towards a deeper understanding of the ethical perceptions and judgment of animal-based tourist attractions on the part of the visitors.

CHAPTER THREE: METHODOLOGY

Introduction

The following chapter details the methodology that was utilized in the current research. The study adopts a quantitative approach, which was designed based on previous studies and qualitative data collected in an earlier study. The chapter begins with outlining the conceptual framework and the research model of the study, followed by a thorough discussion of the study hypotheses. Next, the survey instrument and its components will be described, including the steps that were taken to ensure its reliability and validity. The chapter ends with details on the sampling technique, as well as the statistical procedures to address the research questions and evaluate the study hypotheses.

Conceptual Framework

As noted earlier, the conceptual framework of the current study is based on the exploratory qualitative study which aimed to explore the major issues and concerns that constitute people's ethical perceptions of animal-based attractions (Shani & Pizam, Forthcoming). One of the key roles of qualitative studies is to provide rich and deep information regarding the worldview of the participants about the relevant research questions, which assist in generating theories and models that explain the investigated phenomenon (Aaker, Kumar, & Day, 1995; Finn et al., 2000). The analysis of the focus groups in the aforementioned study revealed three major themes regarding the participants' ethical perceptions and evaluation of animal-based attractions which emerged in the course of the sessions (see Table 4 for explanation of the meaning of each theme and the features that it included):

1. General justifications for having animal-based attractions,
2. Driving forces responsible for ethical use of animals in tourist attractions, and
3. Conditions for the ethical operation of animal-based attractions.

Table 4
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

Based on the previous studies conducted in animal-based attractions, and on the findings of the preliminary investigation by Shani and Pizam (Forthcoming), the research model for the

current study was developed (see Figure 5). Following this proposed model and the research questions, the study focuses on three main aspects: the effect of the respondents' profile on his/her ethical evaluation of animal-based attractions, the components of these attitudes and their relationship and relative significance on the tourists' attitudes, and the influence of these perceptions on the respondents' behavioral intentions regarding animal-based attractions.

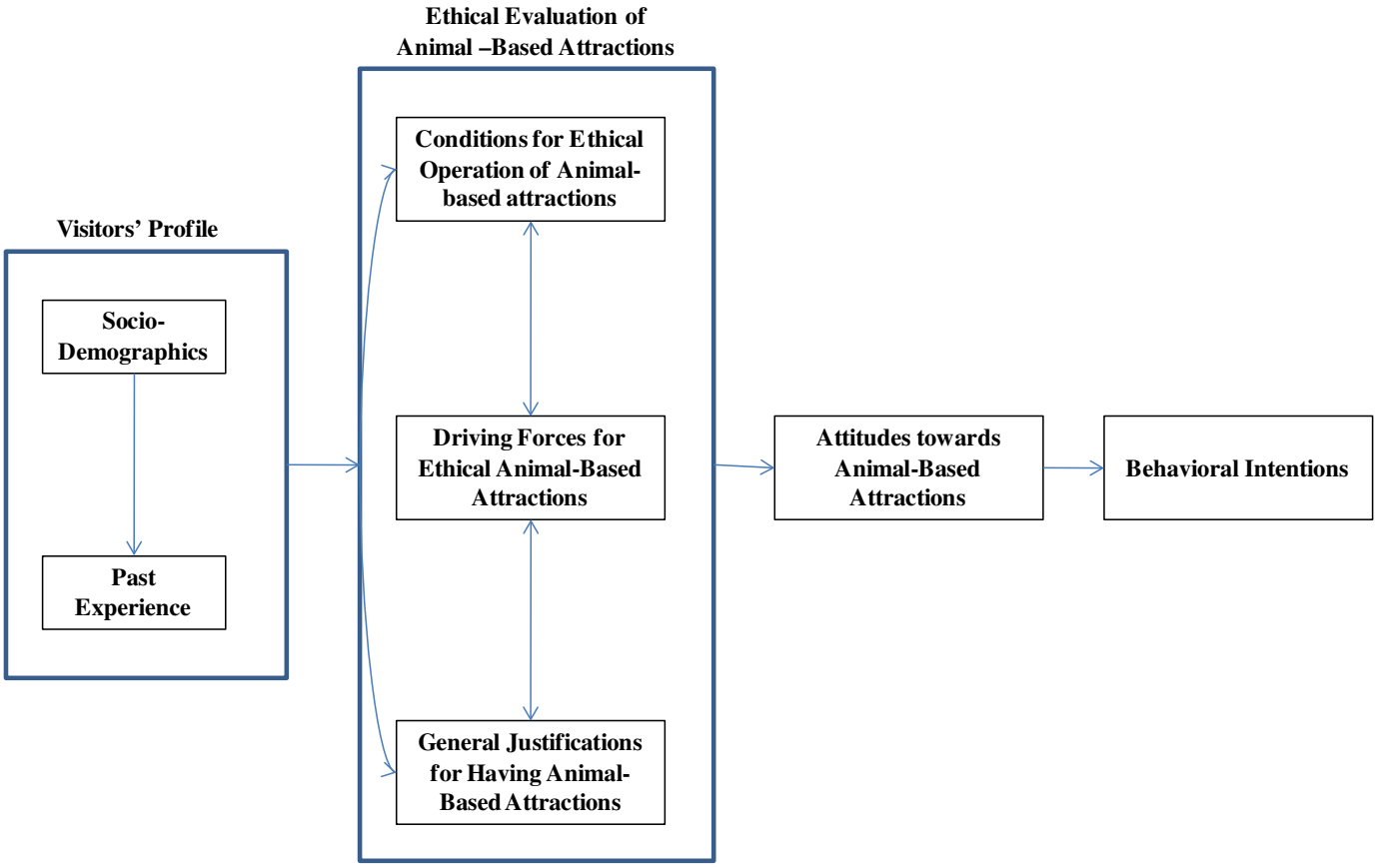


Figure 3: Research Model

Research Hypotheses

Hypothesis 1

In the proposed research model, one's socio-demographic is hypothesized to influence one's past visitation of animal-based attractions. There are some earlier indications regarding the effects of socio-demographics on the tendency to visit zoos and other related attractions. Zoos are perceived as classic sites for families with children to visit; thus, it is more likely for females with children to visit zoos (Wineman, Piper, & Maple, 1996; Klenosky & Saunders, 2007). Similar results were reported by Cain and Merritt (2007), who found that, among zoos and aquariums accredited by the Association of Zoos and Aquariums in the U.S., the largest single category of visitors were young parents with preschool children, while senior citizens represent a lower rate of visitors. Evidence also exists to suggest that visitors to animal-based attractions are more educated than the general public (Cain & Merritt, 2007). Kellert (1978) found that zoo enthusiasts express higher *humanistic* attitudes toward animals than both the general population and other wildlife oriented groups. This led him to conclude that they "may have been more motivated by generalized affections for animals, particularly pets, than by any special attraction to wild animals" (Kellert, 1978, p. 94). Thus the study suggests that a relationship may exist between pet ownership and visits to animal-based attractions. No thorough investigations were conducted to investigate the relationship between ethnicity and/or country of origin and visitation in animal-based attractions, although some indications suggest that such associations do exist (e.g., Philipp, 1999). Based on early indications the following relationships are hypothesized:

H1a: Females will visit animal-based attractions more often than males.

H1b: Married people will visit animal-based attractions more often than single people.

H1c: People with children will visit animal-based attractions more often than people without children.

H1d: Pet owners will visit animal-based attractions more often than people who do not own pets.

H1e: The younger a person is, the more frequent he/she will visit animal-based attractions.

H1f: The higher a person's level of education, the more frequent he/she will visit animal-based attractions.

Hypothesis 2

In the proposed research model, one's socio-demographic status influences one's ethical evaluation of animal-based attractions. In Davey's study (2007b), university students were found to perceive the traditional roles of zoos (entertainment, research, conservation, and education) as more important than the general public. Turley (1998, 2001) found that the importance of education is higher when children accompany adults on the visit. No other studies that investigated the relationship between one's profile and one's perceptions of the justifications for having animal-based attraction were found. Nevertheless, past studies have found a relationship between socio-demographics and attitudes toward wildlife issues, such as conservation and attitudes toward animals, although typically not in the context of tourism (e.g., Al-Fayez et al., 2003; Kellert, 1991; Pifer, Kinya, & Pifer, 1994). Note that no studies investigated the importance of the driving forces for the ethical operation of animal-based attractions, which was explored in the focus group sessions.

Regarding the conditions for the ethical operation of animal-based attractions, previous studies provided some indications regarding the association between animal-based attractions

and one's socio-demographics. Young adults often demonstrate greater sensitivity to animal welfare issues than do elderly people (Reade & Waran, 1996). Other studies have shown that pet owners typically have greater sensitivity to the welfare of captive animals (McPhee et al., 1998; Paul & Serpell, 1993), and that females show greater sensitivity in this regard than males (Ings, Waran, & Young, 1997; Kidd & Kidd, 1989; Herzog, 2007). In light of some early evidence and the exploratory study the following relationships are hypothesized:

H2a: Females will attribute higher importance than males to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H2b: Females will assign higher importance than males to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

H2c: The younger the person is, the more likely he/she is to ascribe higher importance to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H2d: The younger the person is, the more likely he/she is to attach higher importance to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

H2e: Married people will attribute higher importance than single people to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H2f: Single people will assign higher importance than married people to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

H2g: People with children will ascribe higher importance than people without children to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H2h: People with children will attribute higher importance than people without children to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

H2i: The higher a person's level of education, the more likely he/she is to assign high importance to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.
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H2j: The higher a person's level of education, the more likely he/she is to ascribe high importance to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

H2k: Pet owners will attribute higher importance than people who do not own pets to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H2l: Pet owners will assign higher importance than people who do not own pets to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Hypothesis 3

In the proposed research model, frequency of past visitations influences one's ethical evaluation of animal-based attractions. Recently, Davey (2007b) found that zoo visitors perceived the traditional roles of zoos (entertainment, research, conservation, and education) as

more important than did the general public. Nevertheless, there is a lack of studies focusing on the differences in the ethical perceptions of zoos between visitors and non-visitors, as well as on the association between the frequency of visits and the ethical evaluation of animal-based attractions. The following relationships are hypothesized:

H3a: The more a person visits animal-based attractions the higher the importance he/she will attribute to any of the general arguments in favor of the existence of animal-based attractions, such as the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H3b: The more a person visits animal-based attractions, the higher the importance he/she will assign to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, including public opinion, the legal system and institutional supervision.

H3c: The more a person visits animal-based attractions, the higher the importance he/she will ascribe to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Hypothesis 4

In the proposed research model, it is hypothesized that people assign different levels of importance to the various factors influencing their ethical evaluation of animal-based attractions. Previous studies have indicated that, indeed, some roles of animal-based attractions are perceived as more important than others. Various studies have shown that zoos are still primarily perceived as places for entertainment and recreation (Bostock, 1993; Turley, 1998, 2001; Ryan & Saward, 2004). Nevertheless, some recent studies showed a greater appreciation of the roles animal-based attractions play in education, conservation, and, to a lesser degree, scientific research (Davey, 2007b; Mason, 2007). The results of the exploratory study conducted in the previous stage of the current research revealed further justifications for having animal-based attractions, such as the

perceived benefits to individual animals, regulation of wildlife and alternatives to natural habitat, even though their relative importance has not yet been not quantitatively examined. The relative importance of the driving forces for ethical animal-based attractions (i.e. public opinion and legal system and institutional supervision) also emerged during the focus group sessions, while no previous studies have examined these factors.

Regarding the conditions for ethical operation of animal-based attractions, some previous studies provide initial indication of the relative importance of natural representation of the animals (e.g., Rhoads & Glodsworthy, 1979; Hughes et al., 2005; Tomas et al., 2002), and the perception that the animals are expressing natural behavior (Curtin, 2006; Curtin & Wilkes, 2007). The exploratory study revealed other conditions contributing to positive ethical evaluation of animal-based attractions that have received less attention in the literature, thus their weight is still unclear, such as safety, fairness, training methods, and the visitors' behavior. Based on previous indications, hypotheses are as follows:

H4a: People will assign a higher importance to entertainment and recreation will be than to any other general argument in favor of the existence of animal-based attractions, including the fact that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

H4b: People will assign higher importance to natural environment and natural behavior than to any other conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Hypothesis 5

In the proposed research model, it is hypothesized that the ethical evaluation of animal-based attractions will influence the attitude toward such attractions. Growing evidence suggests that certain animal-based attractions nowadays are perceived as less ethically legitimate than

other attractions. More specifically, it appears that the attractiveness of certain animal shows, such as circuses, has decreased in the past few decades (Hughes, 2001; Shackley, 1996). In contrast, in the past few years animal-based attractions offering natural representations of the exhibited wildlife have experienced increasing popularity (Cotibog-Sinha, 2008; Hughes et al., 2005). In their study, Wells and Hepper (1997) found that the participants express more concern about leisure-oriented activities that involved the killing and/or injuring of animals than activities that do not result in similar amounts of animal suffering. In light of this preliminary evidence, the following relationships are hypothesized:

H5a: The higher the importance given to any of the general arguments in favor of the existence of animal-based attractions, the more positive the attitudes a person will have towards zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

H5b: The higher the importance given to any of the general arguments in favor of the existence of animal-based attractions, the more negative the attitudes a person will have toward animal circuses, horse racing, bullfighting, and rodeos.

H5c: The higher the importance given to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, the more positive the attitudes a person will have toward zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

H5d: The higher the importance given to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, the more negative the attitudes a person will have towards animal circuses, horse racing, bullfighting, and rodeos.

H5e: The higher the importance given to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, the more positive the attitudes a person will have towards zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

H5f: The higher the importance given to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, the more negative the attitudes a person will have towards animal circuses, horse racing, bullfighting, and rodeos.

Hypothesis 6

In the proposed research model, it is hypothesized that the attitudes toward animal-based attractions will influence the behavioral intentions regarding such attractions. At present there is a lack of thorough studies on attitudes toward animal-based attractions in general, and their effects on behavioral intentions in particular, in both the tourism and the animal ethics literature (Frost & Roehl, 2007; Jiang et al. 2007). Nevertheless, it is generally accepted in the field of social psychology that one's attitudes are relevant to the understanding of one's behavioral intentions, even though this relationship is not fully understood (Ajzen, 2001). Therefore, the last hypothesis to be proposed is:

> H6: The more positive attitudes a person has towards a specific animal-based attraction, the more likely he/she to express the intention to visit it in the future.

Survey Instrument and Measures

To address the research questions that derive from the study model, the survey instrument for the current study includes six main sections (the survey instrument is presented in Appendix A). The first section of the questionnaire includes questions regarding past visits to various animal-based attractions. Note that since viewing wildlife in captive settings can take place in a variety of settings, which exhibit different characteristics (Orams, 1996, 2002), it was decided to include nine types of such attractions. The chosen sites represent the spectrum of animal-based attractions as illustrated by Shackley (1996), and presented in Figure 2. These sites include aquariums (high mobility restriction with dominant education/conservation orientation), zoos (medium mobility restriction with dominant education/conservation orientation), amusement animal attractions (medium mobility restriction with dominant entertainment orientation), animal circuses (high mobility restriction with dominant entertainment orientation), safaris (low

mobility restriction with mixed entertainment/conservation orientation), wildlife parks (low mobility restriction with dominant education/conservation orientation), horse racing (medium mobility restriction with dominant entertainment orientation), bullfighting (medium mobility restriction with dominant entertainment orientation), and rodeos (medium mobility restriction with dominant entertainment orientation). Note that these attractions represent both more acceptable animal uses (such as zoos, horse racing), and more controversial animal uses (such as circuses) (see Wells & Hepper, 1997).

Note that in this section, respondents were given answer categories, rather than open-ended questions, since it is unlikely that the respondents will have accurate and ready-made answers to questions on past behavior. Thus, using answer categories avoid specificity that exceeds the respondents' ability to give a precise number regarding previous visits throughout a relatively long period of time (Dillman, 2007). In addition, it was shown that open-ended question often result in high non-response rate, leading to larger amount of missing data (Reja, Manfreda, Hlebec, & Vehovar, 2003). Therefore, the respondents were asked to state how many times they have visited each site in the past five years, given the options of "none", "1-2 times", "3-4 times", "5-6 times", and "7 times or more".

The next 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. Nevertheless, there was attempt to use instrument items from previous studies when they addressed similar concepts (e.g., Berkenstein et al., 2003; Ryan & Saward, 2004; Turley, 2001).

Table 5 presents the items used to measure each of the components that construct attitudes toward animal-based attractions. First of all, regarding general justifications for having animal-based attractions, some of the survey items include “Animal attractions play an important role in entertaining visitors”, “Animal attractions play an important recreational role for families”, “Animal attractions allow people to see wildlife without destroying their natural habitat”, “Animal attraction promote environmental awareness”, “Conducting research in animal attractions is sometimes the only way scientists can learn about wildlife”, “Animal attractions are a safe and secure alternative to seeing wildlife in their natural habitat”, and “Animals in attractions are better off than in the wild, since they have no food concerns”. Second, regarding beliefs in driving forces for ethical animal-based attractions, some of the survey items include “Increasing public awareness regarding animal welfare has led animal attractions to be more sensitive in their treatment of animals”, and “Today there are more regulations to ensure the welfare of animals in attractions”.

All the items in the first section were measured on a 5-point Likert scale, where 1=”strongly disagree”, 2=”disagree”, 3=”neither agree nor disagree”, 4=”agree” and 5=”strongly disagree”. Note that it was decided to include verbal labeling for points two to four, rather than for the extreme ends of the scale only, for two main reasons, as suggested by Lewis (1993) and Buttle (1996). First of all, the lack of verbal labeling for each point may cause respondents to overuse the extreme labeled points. Second, it is especially essential to clarify the meaning of the midpoint of the scale, which can have several interpretations. In addition, the respondents received verbal response alternatives, rather than numerical ones, since this was reported in previous studies to be preferred by respondents (Kozak & Rimmington, 2000).

The third section measures the respondents' perceptions of conditions for the ethical operation of specific animal-based attractions. Some of the survey items in this regard include "That the animals express natural behavior", "That the animal enclosures are of a 'good size'", "That the animals are not abused during training", "That the animal shows and exhibits do not constitute any risk for the audience", "That the visitors to the attraction show respectful behavior towards the animals". All the items in this section were measured on a 5-point Likert scale, when 1="very unimportant", 2="unimportant", 3="neither important nor unimportant", 4="important", and 5="very important". As can be seen, similarly to the previous section, verbal labeling was included to each point in the scale, and the respondents received verbal response alternatives rather than numerical.

The fourth section of the questionnaire examines the respondents' attitudes toward specific animal-based attractions. As was noted in the literature review, investigating people's attitudes toward animals and animal use has been the subject of many previous studies, resulting in the development of empirical tools to measure these attitudes (e.g., Herzog et al, 1991; Bowd, 1984, Henry, 2004). Yet, these scales are useful in examining holistic attitudes toward animals and, for the most part, do not provide any insights into specific animal use, such as for tourism and entertainment. Wells and Hepper (1997) pointed to the limitation of this holistic approach, and recommended "to consider each animal use separately rather than consider all uses of animals together" (p. 53). The current paper adopts this typological approach and, following the recommendations of Wells and Hepper (1997), respondents were asked to indicate to what extent they find the aforementioned different types of animal-based attractions morally acceptable. The level of acceptance was measured on a 5-point Likert scale, when 1= "totally unacceptable", 2=

Table 5
Factors in the ethical judgment of animal-based attractions inventory

Components of the ethical perception of animal-based attractions	Visitors' survey items
1. General justifications for having animal-based attractions	Please indicate your level of agreement with each statement below:
A. Entertainment	1. Animal attractions play an important role in entertaining visitors
	2. Animal attractions are places where visitors can see animals entertaining them
B. Family-oriented experience	3. Animal attractions are important places for adults to share something with children
	4. Animal attractions play an important recreational role for families
C. Conservation	5. Animal attractions are important places for conserving wildlife*
	6. Animal attractions play an important role in preserving endangered species
	7. We must support animal attractions so they can develop breeding programs*
	8. Animal attractions allow people to see wildlife without destroying their natural habitat**
D. Education	9. Using animals in tourist attractions is beneficial for educational purposes***
	10. Animal attractions promote environmental awareness ***
	11. Animal attractions are important sites to learn about animals
	12. Animal attractions are important educational sites for children***
	13. Animal attractions demonstrate how to treat animals responsibly
	14. Animal attraction contribute to "softening" the negative image of certain animals and making them less intimidating
E. Scientific research	15. Animal attractions play an important role in scientific research
	16. Conducting research in animal attractions is sometimes the only way scientists can learn about wildlife

Components of the ethical perception of animal-based attractions	Visitors' survey items
	17. The research conducted in animal attractions is vital in order to save species from becoming extinct
F. Alternative to nature	18. Animal attractions are an affordable and inexpensive alternative to seeing wildlife in their natural habitat
	19. Animal attractions are a safe and secure alternative to seeing wildlife in their natural habitat
	20. Without animal attractions many people would not have the opportunity to see wildlife
21. Benefits to individual animals	21. Animals in attractions are better off than animals in the wild, since they are free from predators
	22. Animal in attractions are better off than animals in the wild, since they have no food concerns
	23. Animal attractions provide a safe and secure environment for wildlife
24. Regulation of wildlife	24. Keeping animals in attractions is an important way to regulate and supervise the natural environment and the wildlife
2. Driving forces for ethical animal-based attractions	Please indicate your level of agreement with each statement below:
A. Public opinion	1. Increasing public awareness regarding animal welfare made animal attractions more sensitive in their treatment of animals
	2. Animal attractions have an interest in being more sensitive in their treatment of animals because it is good for business
	3. The concern of negative public relations has made animal attractions more sensitive in their treatment of animals

Components of the ethical perception of animal-based attractions	Visitors' survey items
B. Legal system and institutional supervision	4. Today there is much more governmental control over the way animals are treated in attractions
	5. Today there are much more regulations to ensure the welfare of animals in attractions
	6. Animal rights organizations have led to improvements in the welfare of animals in attractions
3. Conditions for ethical operation of animal-based attractions	How much would you consider the following when visiting animal-based attraction?
A. Natural behavior of animals	1. That animals are 'doing natural things'*
	2. That the animals express natural behavior
	3. That the animal enclosures contain stimulating materials*
B. Natural environment	4. That animal enclosures replicate native habitats*
	5. That animals are kept in their natural environment/habitat**
	6. That the animal enclosures are of a 'good size'*
	7. That the animals have private places away from visitors*
C. Training methods	8. That animals are trained gently
	9. That animals are not abused during training
D. The concept of fairness	10. That the animals receive a 'fair chance' in sport or contest situations
E. Safety	11. That the animal shows and exhibits do not constitute any risk for the audience
	12. That the animal shows and exhibits do not constitute any risk for staff/performers
F. Visitors' behavior	13. That the visitors to the attraction display respectful behavior towards the animals
	14. That there is supervision of the visitors' behavior toward the animals in the attractions
G. Other	15. That the exhibited animals receive sufficient food and medical care
	16. That the zoo keepers are educated and are sensitive to the animals

Components of the ethical perception of animal-based attractions	Visitors' survey items
	17. That the attraction displays rescued wildlife, rather than animals that were simply captured in the wild

* After Ryan & Saward (2004)
** After Benkenstein, Yavas & Forberger (2003)
*** After Turley (2001)

"unacceptable", 3= "neither acceptable nor unacceptable", 4= "acceptable", and 5= "totally acceptable".

The fifth section of the questionnaire relates to the respondents' intention to visit each of the animal-based attractions in the future. The respondents were asked to indicate the likelihood they will visit each site on a 5-point Likert scale, when 1= "very unlikely", 2= "not likely", 3= "neither likely nor unlikely", 4= "likely", and 5= "very unlikely".

Finally, the questionnaire ends with questions regarding the respondents' profile. This section includes a variety of personal background variables, which were found in previous studies to be relevant in constructing people's attitudes toward animals (for the most part not in the context of using animals in tourism). These variables include gender (Herzog, 1991, 2007), age (Kellert, 1985), marital status (Soares, 1985), the number of children below 18 years old (Hunter & Rinner, 2004), pet ownership (Serpell & Paul, 1994), level of education (Kellert, 1996), ethnicity (Brown, 2002), and country of origin (Al-Fayez et al., 2003).

Reliability and Validity Assessments

The measurement instrument was tested for validity and reliability. Validity is defined as "the extent to which the information collected by the researcher truly reflects the phenomenon being studied" (Veal, 2006, p. 41). Veal (2006) argues that tourism studies are facing difficulties in assessing research validity, since the information in these studies is often collected through people's own reports – through questionnaires or interviews – which means that the data cannot be ascertained, as in the case of the more exact sciences. Nevertheless, researchers are required to apply certain steps to maximize the validity of the measurement tool. As noted by Ruane

(2005), “when we claim measurement validity, we claim that we have been successful at measuring what we say we’ve measured” (p. 34).

To establish whether a measurement is trustworthy it is essential to assess its face validity, which is, simply, to ask whether the measurement “looks good” on surface inspection (Ruane, 2005), and its content validity, which assesses “the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose” (Haynes, Richard & Kubany, 1995, p. 239). To achieve these goals, the study applied three steps, as recommended by Khan (2003). The scale items were 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. The reliability of the instrument refers to its stability or consistency, and it is a prerequisite for establishing validity. In this regard, one of the vital calculations in assessing the quality of an instrument is the alpha coefficient, which evaluates its internal consistency (Churchill, 1979). Since the participants’ ethical evaluation of animal-based attractions was measured through three constructs (general justifications for having animal-based attractions, driving forces for ethical animal-based attractions, and conditions for ethical operation of animal-based attractions), a Cronbach’s alpha was used to determine the reliability of each construct (see Madanoglu, Moreo & Leong, 2003).

Cronbach's alpha can range from 0 (zero internal consistency) to 1 (perfect internal consistency). While the reliability score is often open to various interpretations and debate, it is often agreed that the value of 0.6-0.7 indicates acceptable reliability and the value of 0.8 or higher indicates very good reliability (Bland & Altman, 1997). As can be seen in Table 7, 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 .945 for the justification of having animal-based attraction, .844 for the driving forces for having ethical animal –based attractions, and .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. Construct validity of an instrument is defined by Peter (1981) as "the vertical correspondence between a construct which is at unobservable, conceptual level and a purported measure of it which is at an operational level" (p. 134). In other words, when assessing construct validity we are validating the theory behind the measure or scale (McDougall & Munro, 1994). Although construct validity is often established by correlating the measure with other measures which are supposed to examine a similar constructs (Churchill, 1979), 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 (Enright & Newton, 2004).

As can be seen in Tables 6, 7 and 8, 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" (Table 6), and "legal system and institutional supervision" (Table 8), 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. As can be seen, all the item-total correlations were above .439, which is considered fairly and above satisfactory score (Kusluvan & Kusluvan, 2000).

The last issue to be addressed within the validity domain is the external validity of the study's findings, i.e. whether the findings can be generalized to other settings and groups, beyond the investigated sample (Ruane, 2005). The proposed sampling procedure, through intercept survey (see the following section), has limitations in this regard, as it constitutes a form of convenience sampling (Litvin & Kar, 2001). In addition, Central Florida is a distinguished tourism destination, characterized by icon animal-based attractions, such Animal Kingdom, SeaWorld, Discovery Cove, and Gatorland. Therefore, the results should be generalized with caution, as the external validity seems to set some limitations to the study, despite the attempts made in order to ensure maximum heterogeneity among the participants and to reduce the non-response rate.

Table 6
Justifications for Having Animal-Based Attractions: Results of Scale Purification and Reliability Analysis

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
Entertainment	2	.610		
Animal attractions play an important role in entertaining visitors			.439	–
Animal attractions are places where visitors can see animals entertaining them			.439	–
Family-Oriented Experience	2	.825		
Animal attractions are important places for adults to share something with children			.703	–
Animal attractions play an important recreational role for families			.703	–
Conservation	4	.838		
Animal attractions are important places for conserving wildlife			.709	.777
Animal attractions play an important role in preserving endangered species			.746	.760
We must support animal attractions so they can develop breeding programs			.727	.768
Animal attractions allow people to see wildlife without destroying their natural habitat			.506	.860
Education	6	.900		
Using animals in tourist attractions is beneficial for educational purposes			.732	.881
Animal attractions promote environmental awareness			.727	.882

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
Animal attractions are important sites to learn about animals			.832	.867
Animal attractions are important educational sites for children			.785	.874
Animal attractions demonstrate how to treat animals responsibly			.726	.882
Animal attraction contribute to "softening" the negative image of certain animals and making them less intimidating			.585	.903
Scientific Research	3	.837		
Animal attractions play an important role in scientific research			.655	.816
Conducting research in animal attractions is sometimes the only way scientists can learn about wildlife			.736	.737
The research conducted in animal attractions is vital in order to save species from becoming extinct			.711	.762
Alternative to nature	2	.791		
Animal attractions are an affordable and inexpensive alternative to seeing wildlife in their natural habitat			.646	.701
Animal attractions are a safe and secure alternative to seeing wildlife in their natural habitat			.693	.661
Without animal attractions many people would not have the opportunity to see wildlife			.570	.787
Benefits to Individual Animals	3	.874		

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
Animals in attractions are better off than animals in the wild, since they are free from predators			.808	.774
Animal in attractions are better off than animals in the wild, since they have no food concerns			.827	.756
Animal attractions provide a safe and secure environment for wildlife			.654	.910
Regulations of Wildlife	1	–		
Keeping animals in attractions is an important way to regulate and supervise the natural environment and the wildlife			–	–
Total Scale Reliability	24	.945		

Table 7
Driving Forces for Having Animal-Based Attractions: Results of Scale Purification and Reliability Analysis

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
Public Opinion	3	.745		
Increasing public awareness regarding animal welfare made animal attractions more sensitive in their treatment of animals			.654	.568
Animal attractions have an interest in being more sensitive in their treatment of animals because it is good for business			.552	.703
The concern of negative public relations has made animal attractions more sensitive in their treatment of animals			.533	.707
Legal System and Institutional Supervision	3	.802		
Today there is much more governmental control over the way animals are treated in attractions			.703	.671
Today there are much more regulations to ensure the welfare of animals in attractions			.711	.671
Animal rights organizations have led to improvements in the welfare of animals in attractions			.545	.845
Total Scale Reliability	6	.844		

Table 8
Conditions for Ethical Operation of Animal-Based Attractions: Results of Scale Purification and Reliability Analysis

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
Natural Behavior of Animals	3	.920		
That animals are 'doing natural things'			.836	.886
That the animals express natural behavior			.863	.864
That the animal enclosures contain stimulating materials			.815	.903
Natural Environment	4	.953		
That animal enclosures replicate native habitats			.877	.942
That animals are kept in their natural environment/habitat			.889	.938
That the animal enclosures are of a 'good size'			.919	.930
That the animals have private places away from visitors			.863	.946
Training methods	2	.865		
That animals are trained gently			.764	–
That animals are not abused during training			.764	–
Safety	2	.916		
That the animal shows and exhibits do not constitute any risk for the audience			.845	–
That the animal shows and exhibits do not constitute any risk for staff/performers			.845	–
Visitors' Behavior	2	.952		
That the visitors to the attraction display respectful behavior towards the animals			.909	–

Dimensions and Items	No. of Items	Reliability Coefficient (Alphas)	Corrected Item-Total Correlations	Cronbach's Alpha if Item Deleted
That there is supervision of the visitors' behavior toward the animals in the attractions			.909	–
The Concept of Fairness That the animals receive a 'fair chance' in sport or contest situations	1	–	–	–
Treatment of Animals That the exhibited animals receive sufficient food and medical care	1	–	–	–
Zoo Keepers' Background and Behavior That the zoo keepers are educated and are sensitive to the animals	1	–	–	–
Displayed Animals' Origin That the attraction displays rescued wildlife, rather than animals that were simply captured in the wild	1	–	–	–
Total Scale Reliability	17	.980		

Sampling

Data for this study was collected using an intercept survey among visitors to Central Florida. Intercept surveys in tourism aim to target and interview face-to-face visitors in their natural environments, i.e. destinations and attractions - in contrast to mail or telephone interviews - and have shown to be a useful data collection technique (e.g., Finn & Erdem, 1995; Litvin & Kar, 2001; Pearce & Schott, 2005). The targeted participants in the study were tourists visiting Central Florida, who were recruited from five hotels at the destination. Similarly to the previous qualitative study, 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 (Pizam, 1994). 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. Overall a sample size of 267 tourists was obtained, representing approximately 35% response rate. Fifteen questionnaires were found to be unusable, and therefore excluded from the study, leaving sample of 252 participants which allow us to conduct suitable statistical analyses.

Data Analysis

The data collected for the study was coded, recorded, and analyzed using the Statistical Package for the Social Sciences (SPSS Version 16.0). Descriptive statistics were detailed for the study's variables, including - according to the measurement level – mean, median, standard deviation, and frequencies. Hypotheses H1a-f, which focus on the differences in visiting various

animal-based attractions, based on the respondents' characteristics, were examined using the Chi Square Test of Association, One-Way ANOVA, or Spearman's rho correlations. When Chi Square test was used, adjusted standardized residual was calculated to point out the deviations of the observed values from the expected values (see Li, Cheng, Kim, & Petrick, 2008). Note that a value that is larger than 2 (in absolute terms) indicates a meaningful deviation. In the cases where significant results have been obtained in an ANOVA, a Scheffe post hoc test was used to determine where differences lie between the three segments.

Hypotheses H2a-l focus on the influence of socio-demographics on one's ethical evaluation of animal-based attractions, and were evaluated through series of Independent Samples T-Tests, One-Way ANOVA and Pearson/Spearman's rho correlations. Hypotheses H3a-c focus on the relationship between the frequency of past visitation in animal-based attractions and one's ethical evaluation of animal-based attractions. These hypotheses were examined using One-Way ANOVA. In regard to hypotheses H2a-l and H3a-c, in the cases where significant results will be obtained with the ANOVA, a Scheffe post-hoc test was used to determine where the differences between the groups lie. Hypotheses H4a-b deal with the level of importance the respondents assigned to the various factors that constitute the ethical evaluation of animal-based attractions, and were examined through descriptive statistics. Hypotheses 5a-f all focus on the influence of the evaluation of animal-based attractions on the attitudes toward various attractions. In order to examine these hypotheses, a stepwise multiple regression analysis was conducted, in which each of the attitudes toward visiting an attraction (zoos, aquarium, circus, etc.) was regressed on the different dimensions, in each of the three structures of the ethical evaluation of animal-based attractions (i.e. general justifications for having animal-based attractions, driving forces for ethical animal-based attractions, and conditions for ethical

operation of animal-based attractions). The last hypothesis, H6, focuses on the relationship between the attitudes toward animal-based attractions and the intention to visit them in the future. This hypothesis was evaluated through a series of Pearson correlations between the two variables.

CHAPTER FOUR: FINDINGS

Introduction

The following chapter describes the results of the statistical analyses conducted to address the research questions and to assess the study hypotheses. The chapter begins with description of the participants' characteristics, followed by the hypothesis testing, using various descriptive and inference statistical procedures. Overall, six groups of hypotheses are investigated, with a few sub-hypotheses for each. In addition, other related and relevant tests, which are not part of the formal hypotheses sets, are depicted as well. After the results of each hypothesis's group are depicted, a short summary of the prominent findings are provided. The chapter ends with a short synopsis of the chapter, whose findings will be discussed in chapter 5.

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" (divorcees and widows). 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.

An examination of more demographic characteristics reveals that the vast majority of the sample was Caucasian (83.7%), and 66.9% were domestic U.S. visitors, while the rest, 33.1%,

Table 9
Participants' Profile

	Frequency	%	Mean (SD)	Median
Gender				
Female	141	56.2		
Male	110	43.8		
Marital Status				
Single	102	40.6		
Married	127	50.6		
Other	22	8.8		
Age			42.29 (16.42)	42.00
Below 24	42	17.0		
25-34	47	19.0		
35-44	53	21.5		
45-54	44	17.8		
55-64	35	14.2		
65 and Over	26	10.2		
Number of Children			1.50 (1.60)	1.00
0	101	40.6		
1	28	11.2		
2	60	24.1		
3	36	14.5		
4 or More	24	9.6		
Under the age of 18			0.60 (1.08)	.00
0	173	69.5		
1	31	12.4		
2	24	9.6		
3 or more	21	8.4		
Over the age of 18			0.90 (1.36)	.00
0	150	60.2		
1	28	11.2		
2	42	16.9		
3 or More	29	11.6		
Number of Pets			1.40 (1.63)	1.00
0	86	34.4		
1	78	31.2		
2	43	17.2		
3 or More	43	17.2		
Ethnicity				
African American/ Black	12	4.8		

	Frequency	%	Mean (SD)	Median
Asian	6	2.4		
Hispanic	14	5.6		
Caucasian/White	211	83.7		
Other/Refused	9	3.6		
Country of Origin				
U.S.A	166	66.9		
Other than U.S.A	82	33.1		
Britain	30	36.6		
Canada	18	22.0		
Ireland	14	17.1		
Brazil	7	8.5		
Other	13	15.8		
Highest Level of Education				
Attended High School	29	11.7		
Graduated from High School	44	17.8		
Attended College	49	19.8		
Graduated from College	97	39.3		
Post Graduate College	28	11.3		
Income Level				
Under $25,000	43	17.1		
$25,000-$29,999	13	5.2		
$30,000-$39,999	25	9.9		
$40,000-$49,999	24	9.5		
$50,000-$74,999	46	18.3		
$75,000-$99,999	39	15.5		
$100,000 & Over	33	13.1		
Refused	29	11.5		
Money Donation to Animal Welfare Causes				
Yes	145	58.2		
No	104	41.8		
Member in Animal Welfare Organization				
Yes	30	12.0		
No	219	88.0		

were international tourists mainly from Britain, Canada, Ireland, and Brazil. Having pets in the household was a common practice among the participants, with the majority of the sample (65.6%) reporting having at least one pet (average of 1.4 pets per person). Fifty-eight percent of the sample stated that they have donated money to animal welfare causes. However, only a minority (12.0%) were members of an animal welfare organization. See Table 9 for a detailed description of the participants' profile.

Hypothesis Testing

Hypothesis 1

As was noted in the previous chapter, the first group of hypotheses to be addressed was related to the relationship between the tourists' profile and their past visitation to various animal-based attractions. The frequency of visitation to animal-based attractions for the overall participants in the study is shown in Table 10. As can be seen, for four types of attractions more than half of the respondents reported at least one visit in the past five years (68.3% for zoo, 67.5% for aquarium, 52.4% for animal theme park, and 49% for safari or wildlife park). Zoos and aquariums had also the highest rates—both 23.1%—of enthusiast visitors (3 visits or more in the past five years). These attractions were followed by animal circus and animal racing, with only 20.9% and 19%, respectively, reporting at least one visit in the past five years. Finally, the most marginal attractions in terms of visitation rates were rodeo (10.8%) and bullfighting (4%). Note that since a relatively small number of tourists indicated 5 or more visits to animal-based attractions, in some analyses the comparison will be between "none," "1-2 times," and "3 times or more," with regard to the frequency of visits.

Table 10
Frequency of Visitation in Animal-Based Attraction in the Past Five Years: Total Sample

	None	1-2 Times	3-4 Times	5-6 Times	7 Times or More
Zoo	31.7% (n=80)	45.2% (n=114)	14.7% (n=37)	4.8% (n=12)	3.6% (n=9)
Aquarium	32.5% (n=82)	44.4% (n=112)	17.1% (n=43)	4.0% (n=10)	2.0% (n=5)
Animal Circus	79.1% (n=197)	17.3% (n=43)	2.4% (n=6)	.4% (n=1)	.8% (n=2)
Safari or Wildlife Park	51.0% (n=128)	39.4% (n=99)	8.8% (n=22)	.8% (n=2)	.0% (n=0)
Animal Theme Park	47.6% (n=119)	42.0% (n=105)	6.8% (n=17)	1.6% (n=4)	2.0% (n=5)
Animal Racing	81.0% (n=201)	11.7% (n=29)	4.4% (n=11)	1.2% (n=3)	1.6% (n=4)
Bullfighting	96.0% (n=239)	3.6% (n=9)	.4% (n=1)	.0% (n=0)	.0% (n=0)
Rodeo	89.2% (n=224)	8.0% (n=20)	1.2% (n=3)	.0% (n=0)	1.6% (n=4)

Hypothesis 1a

Hypothesis 1a: Females will visit animal-based attractions more often than males.

A chi square test of independence was conducted to assess whether the rate of visitation to animal-based attractions varied upon the gender of the participants. As can be seen in Table 11, only in the case of two animal-based attractions was a statistically significant association between visitation and gender found: animal racing and rodeo. In the case of animal racing, (Pearson χ^2=15.784, p<.001), 14.7% of the males took 3 or more visits to animal racing in the past five years, while only 1.4% of females reported the same. Visitation to rodeo was also found to be related to gender, (Pearson χ^2=6.496, p=.039), where five percent of the females reported 3 or more visits in the past five years in comparison to none among the males. However, the

Table 11
Frequency of Visitation in Animal-Based Attraction in the Past Five Years by Gender

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				3.740	.154
Male	36.4% (n=40) (.8)[a]	38.2% (n=42) (-1.1)	25.5% (n=28) (.5)		
Female	28.4% (n=40) (-.7)	50.4% (n=71) (.9)	21.3% (n=30) (-.5)		
Aquarium				1.671	.434
Male	29.1% (n=32) (-.7)	44.5% (n=49) (.1)	26.4% (n=29) (.7)		
Female	35.5% (n=50) (.6)	44.0% (n=62) (.0)	20.6% (n=29) (-.6)		
Animal Circus				1.948	.378
Male	75.5% (n=83) (-.5)	20.0% (n=22) (.8)	4.5% (n=5) (.5)		
Female	82.6% (n=114) (.4)	14.5% (n=20) (-.7)	2.9% (n=4) (-.5)		
Safari or Wildlife Park				1.131	.568
Male	50.0% (n=55) (-.1)	38.2% (n=42) (-.2)	11.8% (n=13) (.8)		
Female	51.4% (n=72) (.1)	40.7% (n=57) (.2)	7.9% (n=11) (-.7)		
Animal Theme Park				3.782	.151
Male	47.7% (n=52) (.0)	45.9% (n=50) (.7)	6.4% (n=7) (-1.3)		
Female	47.9% (n=67) (.0)	38.6% (n=54) (-.6)	13.6% (n=19) (1.1)		
Animal Racing				15.784	**<.001**
Male	74.3% (n=81) (-.8)	11.0% (n=12) (-.2)	14.7% (n=16) **(2.9)**		
Female	86.2% (n=119) (.7)	12.3% (n=17) (.2)	1.4% (n=2) **(-2.5)**		
Bullfighting				1.282	.527
Male	95.4% (n=104) (.0)	4.6% (n=5) (.5)	.0% (n=0) (-.7)		
Female	96.4% (n=134) (.1)	2.9% (n=4) (-.5)	.7% (n=1) (.6)		
Rodeo				6.496	**.039**
Male	90.0% (n=99) (.1)	10.0% (n=11) (.7)	.0% (n=0) (-1.8)		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Female	88.6% (n=124)	6.4% (n=9)	5.0% (n=7)		
	(.0)	(-.7)	(1.6)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

adjusted standardized residuals indicate no marked deviances from the expected values. Overall, it can be concluded that hypothesis 1a was not supported, thus indicating that females did not visit animal-based attractions more often than males.

Hypothesis 1b

Hypothesis 1b: Married people will visit animal-based attractions more often than single people.

A chi square test of independence was conducted to assess whether the rate of visitation to animal-based attractions varied upon the marital status (single, married, or other) of the participants. As can be seen in Table 12, only in the case of animal racing was the visitation rate statistically significantly related to the marital status of the tourists, (Pearson χ^2=6.496, p=.039). Of the married respondents, 12.8% visited animal racing 3 times or more in the past five years, while 2.0% of the singles visited at the same rate. It is possible to conclude that hypothesis 1b received very limited support, and only with regard to animal racing.

Hypothesis 1c

Hypothesis 1c: People with children will visit animal-based attractions more often than people without children.

Table 12
Frequency of Visitation in Animal-Based Attraction in the Past Five Years by Marital Status

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				5.245	.263
Single	35.3% (n=36) (.6)[a]	46.1% (n=47) (.2)	18.6% (n=19) (-.9)		
Married	26.8% (n=34) (-1.0)	46.5% (n=59) (.2)	26.8% (n=34) (.9)		
Other	45.5% (n=10) (1.1)	31.8% (n=7) (-.9)	22.7% (n=5) (.0)		
Aquarium				1.909	.752
Single	30.4% (n=31) (-.4)	46.1% (n=47) (.3)	23.5% (n=24) (.1)		
Married	32.3% (n=41) (.0)	44.1% (n=56) (.0)	23.6% (n=30) (.1)		
Other	45.5% (n=10) (1.0)	36.4% (n=8) (-.6)	18.2% (n=4) (-.5)		
Animal Circus				2.063	.724
Single	80.4% (n=82) (.1)	16.7% (n=17) (.0)	2.9% (n=3) (-.4)		
Married	79.2% (n=99) (.0)	16.0% (n=20) (-.3)	4.8% (n=6) (.7)		
Other	76.2% (n=16) (-.2)	23.8% (n=5) (.8)	.0% (n=0) (-.9)		
Safari or Wildlife Park				1.582	.812
Single	52.0% (n=53) (.2)	36.3% (n=37) (-.5)	11.8% (n=12) (.7)		
Married	50.8% (n=64) (.0)	41.3% (n=52) (.3)	7.9% (n=10) (-.6)		
Other	45.5% (n=10) (-.4)	45.5% (n=10) (.4)	9.1% (n=2) (.0)		
Animal Theme Park				.712	.950
Single	49.0% (n=50) (.2)	39.2% (n=40) (-.4)	11.8% (n=12) (.4)		
Married	46.4% (n=58) (-.2)	44.0% (n=55) (.4)	9.6% (n=12) (-.3)		
Other	50.0% (n=11) (.1)	40.9% (n=9) (.0)	9.1% (n=2) (-.2)		
Animal Racing				12.334	**.015**
Single	87.0% (n=87) (.7)	11.0% (n=11) (-.2)	2.0% (n=2) **(-2.0)**		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Married	74.4% (n=93) (-.8)	12.8% (n=16) (.3)	12.8% (n=16) **(2.3)**		
Other	90.9% (n=20) (.5)	9.1% (n=2) (-.4)	.0% (n=0) (-1.3)		
Bullfighting				4.296	.367
Single	93.1% (n=95) (-.3)	5.9% (n=6) (1.2)	1.0% (n=1) (.9)		
Married	97.6% (n=122) (.2)	2.4% (n=3) (-.7)	.0% (n=0) (-.7)		
Other	100.0% (n=21) (.2)	.0% (n=0) (-.9)	.0% (n=0) (-.3)		
Rodeo				8.995	.061
Single	88.2% (n=90) (-.1)	5.9% (n=6) (-.8)	5.9% (n=6) (1.9)		
Married	89.7% (n=113) (.1)	10.3% (n=13) (.9)	.0% (n=0) (-1.9)		
Other	90.9% (n=20) (.1)	4.5% (n=1) (-.6)	4.5% (n=1) (.5)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

One-way ANOVA was conducted to assess the differences in the average number of children between those who have not visited the attraction in the past five years, those who visited 1-2 times, and those who visited 3 times or more (see Table 13). In this regard, three different comparisons were performed, based on the total number of children, children below the age of 18, and children above the age of 18. Statistically significant differences were found with regard to three types of attractions—zoos, aquariums, and circuses—all with regard to the average number of children below 18. In the case of zoos, there was a statistically significant difference ($F_{2,246}=5.159$, $p=.008$) in the mean of number of children below the age of 18 between those who had not visited zoos in the past five years (M=.29), those with 1-2 visits (M=.66) and those with 3 or more visits (M=.77). The Scheffe post hoc test showed that there was a

Table 13
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Average Number of Children: One-way ANOVA

	None	1-2 Times	3 Times or More	F Value	Sig.
Zoo	N=79	N=113	N=57		
Total Children	1.27 (1.52)	1.54 (1.74)	1.74 (1.39)	1.508	.223
Children Below 18	.29 (.68)[a]	.66 (1.04)[ab]	.77 (1.10)[b]	5.159	**.006**
Children Above 18	.97 (1.44)	.81 (1.31)	.96 (1.38)	.452	.637
Aquarium	N=81	N=111	N=57		
Total Children	1.46 (1.69)	1.38 (1.41)	1.79 (1.81)	1.283	.279
Children Below 18	.31 (.72)[a]	.56 (.96)[a]	.96 (1.18)[b]	8.050	**<.001**
Children Above 18	1.15 (1.68)	.82 (1.18)	.68 (1.14)	2.268	.106
Circus	N=196	N=42	N=8		
Total Children	1.47 (1.63)	1.40 (1.34)	2.63 (2.07)	2.068	.129
Children Below 18	.53 (.95)[a]	.60 (.91)[a]	1.62 (1.41)[b]	4.984	**.008**
Children Above 18	.92 (1.44)	.81 (1.09)	.63 (1.06)	.262	.769
Safari or Wildlife Park	N=126	N=98	N=24		
Total Children	1.50 (1.55)	1.52 (1.64)	1.42 (1.82)	.040	.961
Children Below 18	.53 (.94)	.69 (1.20)	.63 (1.35)	.617	.540
Children Above 18	.97 (1.47)	.83 (1.25)	.79 (1.29)	.371	.691
Animal Theme Park	N=118	N=103	N=26		
Total Children	1.56 (1.61)	1.34 (1.58)	1.81 (1.72)	1.067	.346
Children Below 18	.50 (.97)	.67 (1.18)	.77 (1.18)	1.032	.358
Children Above 18	1.06 (1.54)	.67 (1.13)	1.04 (1.31)	2.422	.091
Animal Racing	N=198	N=29	N=18		
Total Children	1.40 (1.62)	1.62 (1.42)	2.33 (1.64)	2.885	.058
Children Below 18	.57 (1.04)	.48 (.95)	1.06 (1.63)	1.840	.161
Children Above 18	.83 (1.40)	1.14 (1.27)	1.28 (1.13)	1.361	.258
Bullfighting	N=236	N=9	N=1		
Total Children	1.50 (1.58)	1.22 (2.33)	.0	.558	.573
Children Below 18	.58 (1.04)	1.11 (2.03)	.0	1.210	.300
Children Above 18	.92 (1.39)	.11 (.33)	.0	1.755	.175
Rodeo	N=221	N=20	N=7		
Total Children	1.46 (1.57)	2.00 (1.95)	1.14 (1.57)	1.209	.300
Children Below 18	.58 (1.04)	.80 (1.58)	.57 (.98)	.381	.683
Children Above 18	.88 (1.35)	1.20 (1.61)	.57 (.98)	.702	.497

Bold items are at p≤.05 significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

statistically significant difference between those with no visits and those with 3 or more visits (p=.016).

A statistically significant difference was also found in the case of aquariums ($F_{2,246}$=8.050, p<.001) in the mean number of children below 18 between those with no visits(M=.31), those with 1-2 visits (M=.56), and those with 3 or more visits (M=1.11). The Scheffe post hoc test indicates that there was no statistically significant difference between those with none and those with 1-2 visits, but both differed significantly from those who had visited aquariums 3 times or more (p=.033). Finally, a statistically significant mean difference was also found with regard to circuses ($F_{2,246}$=8.050, p<.001) between those with no visits (M=.56), those with 1-2 visits (M=.60) and those with 3 or more visits (M=1.62). Similar to the case of aquariums, the Scheffe post hoc test indicates that there was no statistically significant difference between the those with none and those with 1-2 visits, but both differed significantly from those who had visited aquariums 3 times or more (p=.023). Overall, it is possible to conclude that hypothesis 1c received some support from the findings, yet only in the case of zoos, aquariums and circuses, and with regard to children under the age of 18.

Hypothesis 1d

Hypothesis 1d: Pet owners will visit animal-based attractions more often than people who do not own pets.

In testing the differences in average number of pets between those with no visits, those with 1-2 visits, and those with 3 or more visits, regarding each of the animal-based attractions, the following results were obtained (see Table 14). There was a statistically significant difference ($F_{2,246}$=3.110, p=.046) in the pets mean for those who had not visited a safari or wildlife park in

the past five years (M=1.45), those who visited 1-2 times (M=1.17), and those with 3 or more visits (M=2.09). The Scheffe post hoc test showed that the statistically significance difference was between those with 1-2 visits and those with 3 or more visits (p=.053).

A statistically significant difference was also found with regard to the average number of pets in the case of animal racing ($F_{2,243}$=5.470, p=.005) between those with no visits to the past five years (M=1.56), those with 1-2 visits (M=.79), and those with 3 visits or more (M=.56). The Scheffe post hoc test showed that the statistically significant difference was between those with no visits and those with 3 visits or more (p=.043). No significant differences in visitors' average number of pets were found with regard to the other animal-based attractions. In light of the theses findings, it is possible to conclude that hypothesis 1d was partially confirmed only in the case of safari or wildlife parks and was not supported in the cases of the other sites.

Hypothesis 1e

Hypothesis 1e: The younger a person is, the more frequent he/she will visit animal-based attractions.

One-way ANOVA was performed for each attraction type to test differences in the age mean between those had not visited the attraction in the past five years, those who visited 1-2 times, and those who visited 3 times or more (see Table 15). The results reveal that in none of the attractions was a significant difference (p<.05) in the mean age found between the three groups. Thus, in the current study, younger persons did not visit animal-based attractions more frequent than older persons and therefore Hypothesis 1e was not confirmed.

Table 14
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Average Number of Pets: One-way ANOVA

	None	1-2 Times	3 Times or More	F Value	Sig.
Zoo	N=80	N=113	N=57		
Pets Mean	1.40 (1.72)	1.34 (1.50)	1.51 (1.77)	.211	.810
Aquarium	N=82	N=111	N=57		
Pets Mean	1.28 (1.70)	1.33 (1.55)	1.68 (1.67)	1.180	.309
Circus	N=197	N=41	N=9		
Pets Mean	1.40 (1.66)	1.54 (1.61)	1.11 (1.37)	.279	.757
Safari or Wildlife Park	N=127	N=99	N=23		
Pets Mean	1.45 (1.61)[ab]	1.17 (1.24)[a]	2.09 (2.76)[b]	3.110	**.046**
Animal Theme Park	N=119	N=103	N=26		
Pets Mean	1.17 (1.52)	1.54 (1.52)	1.88 (2.36)	2.771	.065
Animal Racing	N=199	N=29	N=18		
Pets Mean	1.56 (1.74)[a]	.79 (.90)[ab]	.56 (.70)[b]	5.470	**.005**
Bullfighting	N=237	N=9	N=1		
Pets Mean	1.41 (1.66)	1.33 (1.12)	.0	.374	.688
Rodeo	N=222	N=20	N=7		
Pets Mean	1.42 (1.68)	1.30 (1.26)	.86 (.90)	.445	.642

Bold items are at $p \leq .05$ significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

Hypothesis H1f

Hypothesis H1f: The higher a person's level of education, the more frequent he/she will visit animal-based attractions.

To test the relationship between the frequency of visitation to animal-based attractions and the tourists' levels of education and income, Spearman's rho correlations were performed.

Table 15
Frequency of Visitation in Animal-Based Attraction in the Past Five Years by Age Mean: One-way ANOVA

	None	1-2 Times	3 Times or More	F Value	Sig.
Zoo	N=78	N=111	N=58		
Age Mean	44.38 (17.34)	39.90 (15.80)	44.05 (15.98)	F=2.163	.117
Aquarium	N=80	N=109	N=58		
Age Mean	44.90 (16.70)	42.17 (17.46)	38.91 (13.36)	F=2.262	.106
Animal Circus	N=194	N=42	N=8		
Age Mean	42.20 (16.54)	40.48 (16.19)	47.25 (13.69)	F=.602	.548
Safari or Wildlife Park	N=124	N=99	N=23		
Age Mean	43.63 (17.47)	40.62 (14.95)	41.43 (16.51)	F=.956	.386
Animal Theme Park	N=115	N=104	N=26		
Age Mean	43.43 (16.67)	41.24 (16.41)	41.46 (16.28)	F=.515	.598
Animal Racing	N=197	N=29	N=17		
Age Mean	41.42 (16.81)	44.45 (14.48)	50.41 (13.56)	F=2.623	.075
Bullfighting	N=234	N=9	N=1		
Age Mean	42.77 (16.51)	29.44 (12.19)	51.00	F=3.008	.051
Rodeo	N=221	N=18	N=7		
Age Mean	42.33 (16.47)	43.44 (17.17)	38.43 (15.88)	F=.236	.790

Bold items are at $p \leq .05$ significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

The results of the correlational analyses are presented in Table 16. As can be seen, statistically significant correlations (all in a positive direction) were found between the level of education and frequency of visitation to zoos, ($r=.133$, $p<.05$), and the frequency of visitation to safaris or wildlife parks, ($r=.129$, $p<.05$). Thus, hypothesis H1f received partial support with regard to zoos and safaris and wildlife parks. Note that these correlations can be interpreted as relatively low, although they are statistically significant.

Table 16
Spearman's rho Correlations between Frequency of visitation in Animal-Based Attractions and Levels of Education and Income

	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bullfighting	Rodeo
Level of Education	**.133***	.122	.044	**.129***	-.017	.058	.032	-.015
Level of Income	**.171***	.083	.058	.092	-.049	**.237****	-.011	-.071

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

Other Related Tests

Visitation by Level of Income

Spearman's rho correlations were computed to examine the relationship between frequency of visitation to animal-based attractions and level of income (see Table 16). As can be seen, income is most strongly related to visitation rate for animal racing, ($r=.237$, $p<.001$), followed by visitation rate for zoos, ($r=.171$, $p=.010$)

Visitation by Country of Origin

A chi square test of association was conducted to evaluate whether frequency of visitation to animal-based attractions varied depending upon the tourists' country of origin. Since the vast majority of the sample was comprised of domestic visitors, with the remaining participants coming from a large number of countries, the visitors were divided into U.S. and non-U.S. visitors. The results shown in Table 17 indicate that the only statistically significant difference was with regard to animal theme parks, where those who visited such sites 1-2 times or 3 times or more were characterized by a higher proportion of U.S. visitors (47.3% and 11.5%, respectively), in comparison to international tourists (32.1% and 7.4%, respectively). No statistically significant differences were found with regard to the other animal-based attractions.

Visitation by Ethnicity

To test the association between frequency of visitation to animal-based attractions and ethnicity, a chi square test of association was performed. Since the vast majority of the sample was comprised of Caucasian visitors, with only a small minority of remaining participants coming from different ethnic backgrounds, the visitors were divided into Caucasian and non-

Table 17
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Country of Origin

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				2.940	.230
U.S.A	28.3% (n=47) (-.8)[a]	47.6% (n=79) (.4)	24.1% (n=40) (.4)		
Other than U.S.A	39.0% (n=32) (1.2)	41.5% (n=34) (-.6)	19.5% (n=16) (-.6)		
Aquarium				.925	.630
U.S.A	30.7% (n=51) (-.4)	45.2% (n=75) (.2)	24.1% (n=40) (.3)		
Other than U.S.A	36.6% (n=30) (.6)	42.7% (n=35) (-.2)	20.7% (n=17) (-.4)		
Animal Circus				.054	.973
U.S.A	80.0% (n=132) (.1)	16.4% (n=27) (-.1)	3.6% (n=6) (.0)		
Other than U.S.A	78.8% (n=63) (.0)	17.5% (n=14) (.2)	3.8% (n=3) (.0)		
Safari or Wildlife Park				3.609	.165
U.S.A	52.4% (n=87) (.3)	40.4% (n=67) (.1)	7.2% (n=12) (-1.0)		
Other than U.S.A	46.9% (n=38) (-.5)	38.3% (n=31) (-.2)	14.8% (n=12) (1.5)		
Animal Theme Park				8.108	**.017**
U.S.A	41.2% (n=68) (-1.2)	47.3% (n=78) (1.0)	11.5% (n=19) (.5)		
Other than U.S.A	60.5% (n=49) (1.7)	32.1% (n=26) (-1.4)	7.4% (n=6) (-.8)		
Animal Racing				.268	.874
U.S.A	80.4% (n=131) (.0)	11.7% (n=19) (.0)	8.0% (n=13) (.3)		
Other than U.S.A	81.5% (n=66) (.1)	12.3% (n=10) (.1)	6.2% (n=5) (-.4)		
Bullfighting				1.004	.605
U.S.A	95.1% (n=156) (-.1)	4.3% (n=7) (.4)	.6% (n=1) (.4)		
Other than U.S.A	97.5% (n=79) (.1)	2.5% (n=2) (-.6)	.0% (n=0) (-.6)		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Rodeo				5.387	.068
U.S.A	86.1% (n=143) (-.4)	9.6% (n=16) (.7)	4.2% (n=7) (1.1)		
Other than U.S.A	95.1% (n=77) (.6)	4.9% (n=4) (-1.0)	.0% (n=0) (-1.5)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

Caucasian visitors. The findings shown in Table 18 indicate no statistical differences between whites and non-whites with regard to visitation patterns at animal-based attractions.

Visitation by Animal Welfare-Related Behavior

A chi square test of association was conducted to evaluate whether the frequency of visitation to animal-based attractions vary depending upon whether the tourists had donated money to animal-welfare causes (see Table 19) and whether they were members of animal welfare organizations (see Table 20). With regard to money donation, frequency of visitation was statistically significantly related to whether the tourist had donated money to animal welfare organizations in the cases of zoos, (Pearson χ^2=6.253, p=.044), and rodeo, (Pearson χ^2=6.245, p=.044). In both cases, donors to animal welfare causes were characterized by a higher percentage of visitors to these sites compared to tourists who did not report on such donations.

With regard to the differences in frequency of visitation between members and non-members in animal-welfare organizations, a statistically significant difference was found only in the case of bullfighting, (Pearson χ^2=8.452, p=.015). Non-members were characterized as having a higher proportion of people who had visited bullfighting 1-2 times. Note that one participant

Table 18
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Ethnicity

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				2.691	.260
Caucasian/White	31.6% (n=67) (.0)[a]	43.9% (n=93) (-.4)	24.5% (n=52) (.5)		
Other	31.3% (n=10) (.0)	56.3% (n=18) (.9)	12.5% (n=4) (-1.2)		
Aquarium				.518	.772
Caucasian/White	31.1% (n=66) (-.2)	44.8% (n=95) (.1)	24.1% (n=51) (.1)		
Other	37.5% (n=12) (.6)	40.6% (n=13) (-.3)	21.9% (n=7) (-.2)		
Animal Circus				.524	.769
Caucasian/White	79.4% (n=166) (.1)	16.7% (n=35) (-.2)	3.8% (n=8) (.1)		
Other	75.0% (n=24) (-.2)	21.9% (n=7) (.6)	3.1% (n=1) (-.2)		
Safari or Wildlife Park					
Caucasian/White	48.8% (n=103) (-.4)	41.2% (n=87) (.4)	10.0% (n=21) (.0)	2.246	.325
Other	62.5% (n=20) (.9)	28.1% (n=9) (-1.0)	9.4% (n=3) (.0)		
Animal Theme Park				4.920	.085
Caucasian/White	45.7% (n=96) (-.4)	42.4% (n=89) (.1)	11.9% (n=25) (.7)		
Other	59.4% (n=19) (1.0)	40.6% (n=13) (-.1)	.0% (n=0) (-1.8)		
Animal Racing				2.994	.224
Caucasian/White	79.8% (n=166) (-.2)	11.5% (n=24) (.0)	8.7% (n=18) (.6)		
Other	87.5% (n=28) (.4)	12.5% (n=4) (.1)	.0% (n=0) (-1.5)		
Bullfighting				1.589	.452
Caucasian/White	95.2% (n=200) (.0)	4.3% (n=9) (.4)	.5% (n=1) (.1)		
Other	100.0% (n=32) (.2)	.0% (n=0) (-1.1)	.0% (n=0) (-.4)		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Rodeo				2.314	.314
Caucasian/White	88.2% (n=186) (-.2)	9.0% (n=19) (.4)	2.8% (n=6) (.3)		
Other	96.9% (n=31) (.5)	3.1% (n=1) (-1.0)	.0% (n=0) (-.9)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

reported membership in an animal welfare organization and 3 or more visits to bullfighting, thus slightly skewing the results in this category.

Summary

The results of the testing of Hypothesis 1, about the differences in visitation patterns at animal-based attractions based on various profile characteristics, reveals that visits to certain types of attractions is a common practice, and generally that frequency of visitation to animal-based attractions crosses socio-demographics and other participants' attributes. The most popular attractions among the respondents are zoos, aquariums, animal theme parks, and wildlife parks, followed by animal circuses, animal racing, bullfighting, and rodeos. Note that in the cases of zoos, aquariums, and animal theme parks, at least 10% of the participants can be seen as enthusiast visitors, with at least three visits to the past five years. On the other hand, visiting rodeos, and especially bullfighting, were exceptionally marginal activities among the sample.

Statistically significant differences in frequency of visitation were found based on some socio-demographic characteristics with regard to some of the attraction types as follows:

Table 19
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Donations to Animal Welfare Causes

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				6.253	**.044**
Donor	29.7% (n=43) (-.5)	41.4% (n=60) (-.6)	29.0% (n=42) (1.4)		
Not Donor	35.6% (n=37) (.6)	49.% (n=51) (.7)	15.4% (n=16) (-1.7)		
Aquarium					
Donor	29.7% (n=43) (-.7)	44.8% (n=65) (.1)	25.5% (n=37) (.7)	2.211	.331
Not Donor	37.5% (n=39) (.8)	43.3% (n=45) (-.1)	19.2% (n=20) (-.8)		
Animal Circus				4.303	.116
Donor	79.7% (n=114) (.0)	14.7% (n=21) (-.6)	5.6% (n=8) (1.2)		
Not Donor	79.6% (n=82) (.0)	19.4% (n=20) (.7)	1.0% (n=1) (-1.4)		
Safari or Wildlife Park					
Donor	47.2% (n=68) (-.6)	42.4% (n=61) (.5)	10.4% (n=15) (.3)	1.766	.414
Not Donor	55.8% (n=58) (.7)	35.6% (n=37) (-.6)	8.7% (n=9) (-.3)		
Animal Theme Park				2.349	.309
Donor	44.8% (n=64) (-.6)	42.7% (n=61) (.3)	12.6% (n=18) (.8)		
Not Donor	52.9% (n=55) (.7)	39.4% (n=41) (-.3)	7.7% (n=8) (-.9)		
Animal Racing				.343	.843
Donor	81.0% (n=115) (.0)	11.3% (n=16) (.0)	7.7% (n=11) (.4)		
Not Donor	82.5% (n=82) (.1)	11.7% (n=12) (.1)	5.8% (n=6) (-.4)		
Bullfighting				.751	.867
Donor	95.8% (n=136) (.0)	3.5% (n=5) (.0)	.7% (n=1) (.6)		
Not Donor	96.2% (n=100) (.0)	3.8% (n=4) (.1)	.0% (n=0) (-.7)		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Rodeo				6.245	**.044**
Donor	85.4% (n=123) (-.5)	10.4% (n=15) (1.2)	4.2% (n=6) (1.0)		
Not Donor	95.2% (n=99) (.6)	3.8% (n=4) (-1.4)	1.0% (n=1) (-1.1)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

(1) Males were characterized by a higher frequency of visitation to animal racing, while females were more likely to visit rodeos (although the difference in the latter is not meaningful);

(2) Married tourists were found to have a higher percentage of enthusiast visitors in animal racing, in comparison to single tourists;

(3) Frequency of visits to zoos, aquariums, and circuses was found to be positively related to tourists' average number of children under the age of 18;

(4) Enthusiast visitors to safaris or wildlife parks (those with 3 visits or more) were found to have a higher mean number of pets compared to those with only 1-2 visits, but on the other hand, enthusiast visitors to animal racing had a lower average number of pets in comparison to non-visitors;

(5) Domestic U.S. tourists were characterized by a higher frequency of visitation to animal theme parks compared to international tourists;

(6) A significant positive relationship, albeit low, was found between level of education and frequency of visitation to zoos and safaris and animal theme parks;

Table 20
Frequency of Visitation in Animal-Based Attractions in the Past Five Years by Membership in Animal Welfare Organization

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Zoo				5.372	.068
Member	26.7% (n=8) (-.5)	33.3% (n=10) (-.9)	40.0% (n=12) (1.9)		
Not Member	32.9% (n=72) (.2)	46.1% (n=101) (.3)	21.0% (n=46) (-.7)		
Aquarium				1.428	.490
Member	23.3% (n=7) (-.9)	50.0% (n=15) (.5)	26.7% (n=8) (.4)		
Not Member	34.2% (n=75) (.3)	43.4% (n=95) (-.2)	22.4% (n=49) (-.2)		
Animal Circus				1.479	.477
Member	72.4% (n=21) (-.4)	20.7% (n=6) (.5)	6.9% (n=2) (.9)		
Not Member	80.6% (n=175) (.2)	16.1% (n=35) (-.2)	3.2% (n=7) (-.3)		
Safari or Wildlife Park				1.008	.604
Member	58.6% (n=17) (.6)	31.0% (n=9) (-.7)	10.3% (n=3) (.1)		
Not Member	49.8% (n=109) (-.2)	40.6% (n=89) (.3)	9.6% (n=21) (.0)		
Animal Theme Park				.541	.763
Member	50.0% (n=15) (.1)	43.3% (n=13) (.2)	6.7% (n=2) (-.7)		
Not Member	47.9% (n=104) (.0)	41.0% (n=89) (.0)	11.1% (n=24) (.2)		
Animal Racing				4.810	.090
Member	70.0% (n=21) (-.7)	23.3% (n=7) (1.9)	6.7% (n=2) (.0)		
Not Member	83.3% (n=179) (.3)	9.8% (n=21) (-.7)	7.0% (n=15) (.0)		
Bullfighting					
Member	96.7% (n=29) (.0)	.0% (n=0) (-1.0)	3.3% (n=1) (2.5)	8.452	**.015**
Not member	95.8% (n=207) (.0)	4.2% (n=9) (.4)	.0% (n=0) (-.9)		

	None	1-2 Times	3 Times or More	χ^2 Value	Sig.
Rodeo				.077	.962
Member	90.0% (n=27) (.0)	6.7% (n=2) (-.2)	3.3% (n=1) (.2)		
Not Member	89.4% (n=195) (.0)	7.8% (n=17) (.1)	2.8% (n=6) (.0)		

χ^2 and significant level are presented for the chi square test of association. Bold items are at $p \leq .05$ significant level.
[a] Adjusted standardized residual.

(7) A significant, low positive relationship was found between tourists' level of income and frequency of visitation to zoos, and a stronger relationship was found between income and visitation to animal racing;

(8) Donors to animal welfare causes were found to be more frequent zoo and rodeo visitors, , than non-donors; and

(9) Members of animal welfare organizations reported lower rates of visits to bullfighting attractions than non- members.

Hypothesis 2

As was noted in the previous chapter, the second group of hypotheses to be addressed was related to the relationship between socio-demographic characteristics and the ethical evaluation of animal-based attractions. The tests used to evaluate the hypotheses will be described below, followed by the assessment of each hypothesis. Note that in some cases, relevant tests related to the association of socio-demographics and the ethical evaluation of animal-based attractions were performed, even though they do not address specific hypotheses.

Hypotheses 2a and 2b

Hypothesis 2a: Females will attribute higher importance than males to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2b: Females will assign higher importance than males to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

An independent sample t-test was conducted to determine the association between gender and the components of each of the three constructs of ethical evaluation of animal-based attractions. The results are presented in Table 21. With regard to the justifications for having animal-based attractions, the test was statistically significant for education, (t=-2.197, p=.029), for scientific research, (t=-2.806, p=.005), and for benefits to individual animals, (t=-2.027, p=.044). On average, females expressed greater agreement than males with regard to the roles of animal-based attractions in education (3.97 vs. 3.75), scientific research (3.57 vs. 3.22), and benefit to individual animals (3.15 vs. 2.87). Therefore, it is possible to conclude that hypothesis 2a was partially confirmed.

Further independent sample t-tests were performed to assess hypothesis 2b. As can be seen in Table 18, the tests were significant with regard to each of the conditions for ethical operation of animal-based attractions, including natural behavior of animals, (t=-3.427, p=.001); natural environment, (t=-2.701, p=.007); training methods,(t=-2.079, p=.039); the concept of fairness, (t=-3.368, p=.001); safety, (t=-2.840, p=.005); visitors' behavior, (t=-2.682, p=.008); treatment of animals, (t=-2.003, p=.046); zoo keepers' background and behavior, (t=-1.988,

Table 21
Ethical Evaluations of Animal-Based Attractions by Gender: Independent Samples T-Tests

	Male Mean (SD)	Female Mean (SD)	t-value	Sig
Justifications for Having Animal-Based Attractions[1]				
Entertainment	3.45 (.80)	3.38 (1.02)	.620	.536
Family-Oriented Experience	3.88 (.84)	3.96 (.88)	-.720	.472
Conservation	3.89 (.75)	4.06 (.81)	-1.657	.099
Education	3.75 (.70)	3.97 (.83)	-2.197	**.029**
Scientific Research	3.22 (.99)	3.57 (.98)	-2.806	**.005**
Alternative to Nature	3.86 (.73)	3.87 (.86)	-.069	.945
Benefits to Individual Animals	2.87 (.96)	3.15 (1.13)	-2.027	**.044**
Regulations of Wildlife	2.85 (1.20)	3.14 (1.22)	-1.878	.062
Driving Forces for Ethical Animal-Based Attractions[1]				
Public Opinion	3.66 (.70)	3.77 (.78)	-1.059	.291
Legal System and Institutional Supervision	3.58 (.75)	3.82 (.79)	-2.380	**.018**
Conditions for Ethical Operation of Animal-Based Attractions[2]				
Natural Behavior of Animals	3.97 (1.06)	4.41 (.94)	-3.427	**.001**
Natural Environment	4.14 (1.02)	4.48 (.99)	-2.701	**.007**
Training Methods	4.24 (1.06)	4.51 (1.01)	-2.079	**.039**
The Concept of Fairness	3.62 (1.25)	4.15 (1.20)	-3.368	**.001**
Safety	3.98 (1.20)	4.39 (1.01)	-2.840	**.005**
Visitors' Behavior	4.19 (1.10)	4.54 (.98)	-2.682	**.008**
Treatment of Animals	4.42 (1.14)	4.69 (.95)	-2.003	**.046**
Zoo Keepers' Background and Behavior	4.35 (1.13)	4.61 (.98)	-1.988	**.048**
Displayed Animals' Origin	3.80 (1.21)	4.23 (1.12)	-2.896	**.004**

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.

p=.048); and the origin of the displayed animals—rescued or captive, (t=-2.896, p=.004).

Females attributed higher importance than males to all of the aforementioned conditions when

visiting animal-based attractions. Consequently, it is possible to conclude that hypothesis 2b was fully confirmed.

Finally, independent t-tests were conducted to evaluate the gender differences with regard to the beliefs in driving forces for having animal-based attractions. The test was statistically significant only with regard to the perceived importance of the legal system and institutional supervision, (t=-2.380, p=.018). Similar to the aforementioned results, on average, females perceived these attributes as more meaningful than males did (3.82 vs. 3.58).

Hypotheses 2c and 2d

Hypothesis 2c: The younger the person is, the more likely he/she is to ascribe higher importance to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2d: The younger the person is, the more likely he/she is to attach higher importance to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

One-way ANOVA was conducted to assess differences in the ethical evaluation of animal-based attractions between different age groups. The findings presented in Table 22 indicate statistically significant differences with regard to the perceived roles of animal-based attractions in entertainment ($F_{5, 232}$= 2.541, p=.029) and as family-oriented experiences ($F_{5, 241}$= 2.437, p=.035). The Scheffe post hoc test showed that tourists who were 65 years old or more ascribed higher importance than those who were below 24 to the role of animal attractions in entertainment (p<.10). The post hoc test did not reveal, however, statistically significant

differences in the case of family-oriented experience. Overall, it can be concluded that hypothesis 2c received very limited support, and only in the case of the role of animal-based attractions in entertainment.

In a slight contrast, the one-way ANOVA reveals no statistically significant difference between the different age groups regarding the conditions for ethical operation of animal-based attractions. As a result, it is possible to conclude that hypothesis 2d was not confirmed. Nevertheless, statistically significant differences were detected with regard to beliefs about driving forces for having ethical animal-based attractions, public opinion ($F_{5, 239}$= 3.866, p=.002), and legal system and institutional supervision ($F_{5, 239}$= 2.185, p=.057), even though the latter is only on the verge of the .05 significant level. The Scheffe post hoc tests reveal that for both public opinion (p<.05) and legal system and institutional supervision (p<.05), tourists who were 65 years old and over attributed higher importance to the driving forces in comparison to tourists between the ages of 25-34.

Hypotheses 2e and 2f

Hypothesis 2e: Married people will attribute higher importance than single people to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2f: Single people will assign higher importance than married people to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Table 22
Ethical Evaluations of Animal-Based Attractions by Age: One-way ANOVA

	Below 24 Mean (SD)	25-34 Mean (SD)	35-44 Mean (SD)	45-54 Mean (SD)	55-64 Mean (SD)	65 and Over Mean (SD)	F-value	Sig
Justifications for Having Animal-Based Attractions[1]								
Entertainment	3.35 (.80)[a]	3.03 (1.02)[ab]	3.53 (.93)[ab]	3.58 (.75)[ab]	3.41 (.95)[ab]	3.70 (1.09)[b]	2.541	**.029**
Family-Oriented Experience	3.74 (.72)	3.66 (1.13)	3.94 (.90)	4.09 (.51)	4.14 (.69)	4.13 (1.01)	2.437	**.035**
Conservation	4.10 (.58)	3.77 (.97)	4.07 (.83)	3.90 (.77)	3.99 (.69)	4.21 (.77)	1.491	.193
Education	3.89 (.66)	3.76 (.96)	3.78 (.78)	4.02 (.53)	3.95 (.54)	3.89 (1.17)	.683	.637
Scientific Research	3.53 (.94)	3.46 (1.02)	3.44 (1.05)	3.42 (.99)	3.18 (.88)	3.45 (1.19)	.519	.762
Alternative to Nature	3.83 (.73)	3.67 (1.00)	3.93 (.68)	3.91 (.77)	3.91 (.69)	4.04 (1.01)	.934	.460
Benefits to Individual Animals	3.09 (1.00)	2.76 (1.00)	3.03 (1.11)	2.98 (.92)	3.08 (1.08)	3.36 (1.39)	1.126	.347
Regulations of Wildlife	3.14 (1.18)	2.79 (1.18)	3.11 (1.30)	2.91 (1.18)	2.89 (.99)	3.31 (1.54)	.925	.465
Driving Forces for Ethical[1] *Animal-Based Attractions*								
Public Opinion	3.60[ab] (.59)	3.41[a] (.91)	3.83[ab] (.54)	3.77[ab] (.73)	3.88[ab] (.68)	4.09[b] (.92)	3.866	**.002**
Legal System and Institutional Supervision	3.70[ab] (.68)	3.48[a] (.93)	3.70[ab] (.69)	3.70[ab] (.77)	3.86[ab] (.80)	4.08[b] (.76)	2.185	.057

	Below 24 Mean (SD)	25-34 Mean (SD)	35-44 Mean (SD)	45-54 Mean (SD)	55-64 Mean (SD)	65 and Over Mean (SD)	F-value	Sig
Conditions for Ethical Operation of Animal-Based Attractions[2]								
Natural Behavior of Animals	4.19 (.86)	4.23 (1.15)	4.18 (1.05)	4.11 (1.09)	4.23 (.98)	4.47 (.91)	.459	.806
Natural Environment	4.48 (.72)	3.35 (1.13)	4.18 (1.13)	4.24 (1.05)	4.29 (1.00)	4.52 (1.02)	.644	.667
Training Methods	4.58 (.83)	4.33 (1.17)	4.29 (1.10)	4.28 (1.09)	4.46 (.96)	4.44 (1.11)	.536	.749
The Concept of Fairness	3.79 (1.30)	3.87 (1.36)	3.81 (1.23)	3.82 (1.24)	4.21 (1.09)	4.12 (1.28)	.720	.609
Safety	4.21 (.94)	4.12 (1.18)	4.19 (1.23)	4.17 (1.08)	4.37 (1.06)	4.27 (1.26)	.224	.952
Visitors' Behavior	4.58 (.71)	4.39 (1.13)	4.09 (1.22)	4.41 (1.04)	4.44 (.98)	4.46 (1.10)	1.163	.328
Treatment of Animals	4.69 (.81)	4.57 (1.14)	4.45 (1.19)	4.52 (1.05)	4.57 (.98)	4.62 (1.10)	.264	.932
Zoo Keepers' Background and Behavior	4.71 (.71)	4.53 (1.14)	4.40 (1.15)	4.43 (.98)	4.50 (1.10)	4.49 (1.06)	.545	.742
Displayed Animals' Origin	4.40 (.91)	4.00 (1.29)	3.87 (1.26)	3.82 (1.24)	3.94 (1.08)	3.35 (1.13)	1.774	.119

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

In testing the mean differences between the three marital status groups (singles, married, and other), no statistically significant differences were found with regard to any of the three constructs of ethical evaluation of animal-based attractions (see Table 23). Consequently, it is possible to conclude that hypothesis 2e and hypothesis 2f were not confirmed in the context of the current study.

Hypothesis 2g and 2h

Hypothesis 2g: People with children will ascribe higher importance than people without children to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2h: People with children will attribute higher importance than people without children to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior

Pearson correlation coefficients were computed to determine whether there were relationships between the ethical evaluation of animal-based attractions and tourists' number of children. The results presented in Table 24 show that the most statistically significant, strongest positive correlation was between overall number of children and the perception of animal-based attractions as family-oriented experiences, ($r=.237$, $p<.01$). The agreement regarding this role of animal-based attractions was also associated with number of children under 18, ($r=.169$, $p<.05$), and number of children above 18, ($r=.143$, $p<.05$).

Table 23
Ethical Evaluations of Animal-Based Attractions by Marital Status

	Single Mean (SD)	Married Mean (SD)	Other Mean (SD)	F-value	Sig
Justifications for Having Animal-Based Attractions[1]					
Entertainment	3.27 (1.01)	3.49 (.85)	3.61 (.87)	2.191	.114
Family-Oriented Experience	3.78 (.94)	4.00 (.75)	4.16 (.97)	2.699	.069
Conservation	4.00 (.81)	3.97 (.77)	3.97 (.87)	.043	.958
Education	3.89 (.84)	3.88 (.70)	3.77 (.95)	.226	.798
Scientific Research	3.47 (1.01)	3.36 (.98)	3.48 (1.07)	.382	.683
Alternative to Nature	3.73 (.91)	3.96 (.67)	3.89 (.98)	2.263	.106
Benefits to Individual Animals	3.02 (1.09)	3.03 (1.02)	2.98 (1.28)	.020	.980
Regulations of Wildlife	3.11 (1.20)	2.95 (1.23)	2.86 (1.28)	.626	.536
Driving Forces for Ethical Animal-Based Attractions[1]					
Public Opinion	3.67 (.79)	3.79 (.70)	3.58 (.75)	1.126	.326
Legal System and Institutional Supervision	3.71 (.83)	3.72 (.77)	3.71 (.68)	.007	.993
Conditions for Ethical Operation of Animal-Based Attractions[2]					
Natural Behavior of Animals	4.24 (1.04)	4.26 (.92)	3.84 (1.36)	1.603	.203
Natural Environment	4.37 (.99)	4.37 (.93)	3.93 (1.47)	1.889	.153
Training Methods	4.47 (1.03)	4.38 (.98)	4.14 (1.41)	.966	.382
The Concept of Fairness	3.88 (1.31)	4.00 (1.19)	3.64 (1.29)	.875	.418

	Single Mean (SD)	Married Mean (SD)	Other Mean (SD)	F-value	Sig
Safety	4.32 (1.04)	4.21 (1.11)	3.75 (1.36)	2.369	.096
Visitors' Behavior	4.50 (.97)	4.37 (1.03)	3.93 (1.37)	2.794	.063
Treatment of Animals	4.64 (1.00)	4.57 (1.00)	4.27 (1.39)	1.109	.332
Zoo Keepers' Background and Behavior	4.59 (.99)	4.46 (1.04)	4.23 (1.38)	1.167	.313
Displayed Animals' Origin	4.18 (1.12)	3.95 (1.17)	3.91 (1.44)	1.175	.311

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

Significant correlations were also found between total number of children and agreement regarding the role of animal-based attractions in entertainment, ($r=.138$, $p<.05$), and between the justification of the attractions' existence as an alternative to nature and number of children above 18, ($r=.158$, $p<.05$). Yet these correlations can be interpreted as relatively low. In light of these results, it is possible to conclude that hypothesis 2g received relatively weak support, with the only marked confirmation with regard to the relationship between number of children and agreement regarding the role of the attractions as family-oriented experiences.

A review of Table 24 reveals significant positive relationships between the perceived importance of fairness, ($r=.131$, $p<.05$), and safety, ($r=.135$, $p<.05$), with number of children above 18. Somewhat surprisingly, a negative significant relationship was found between the perceived importance of visitors' behavior in animal-based attractions and number of children under 18, ($r=-.164$, $p<.01$). Yet the above correlations can be interpreted as relatively low

Table 24
Pearson Correlations between Ethical Evaluations of Animal-Based Attractions and Number of Children and Pets

	Total Children	Under 18	Above 18	Pets
Justifications for Having Animal-Based Attractions				
Entertainment	**.138***	.109	.076	-.021
Family-Oriented Experience	**.237****	**.169****	**.143***	-.022
Conservation	.067	.114	-.012	.025
Education	.081	.028	.072	.053
Scientific Research	-.028	-.007	-.027	-.063
Alternative to Nature	.211	.111	**.158***	-.035
Benefits to Individual Animals	.081	.032	.069	-.111
Regulations of Wildlife	.034	-.006	.044	**-.125***
Driving Forces for Ethical Animal-Based Attractions				
Public Opinion	**.186****	.032	**.193****	-.084
Legal System and Institutional Supervision	.074	.019	.071	.012
Conditions for Ethical Operation of Animal-Based Attractions				
Natural Behavior of Animals	.029	-.071	.092	.076
Natural Environment	-.056	-.116	.027	.084
Training Methods	-.046	-.096	.022	.083
The Concept of Fairness	.073	-.056	**.131***	.028
Safety	.085	-.045	**.135****	.025
Visitors' Behavior	-.050	**-.164****	.072	.082
Treatment of Animals	-.011	-.105	.070	.042
Zoo Keepers' Background and Behavior	-.041	-.074	.011	.085
Displayed Animals' Origin	-.037	-.090	.027	.083

*Significant at the .05 level. **Significant at the .001 level (two-tailed tests).

correlations, and overall it can be concluded hypothesis 2h has not received support. The strongest statistically significant correlations were found between the belief in public opinion as

a driving force for having ethical animal-based attractions and both total number of children, (r=.186, p<.01), and number of children above 18, (r=.193, p<.01).

Hypotheses 2i and 2j

Hypothesis 2i: The higher a person's level of education, the more likely he/she is to assign high importance to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2j: The higher a person's level of education, the more likely he/she is to ascribe high importance to any of the conditions needed to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Spearman's rho correlation coefficients were computed to determine whether there was a relationship between the level of education and the ethical evaluation of animal-based attractions (see Table 25). As can be seen, with regard to the justifications for having animal-based attractions, five out of eight items were found to be statistically significant, all in the negative direction. The strongest negative relationship was between education and the perceived benefits of animal-based attractions to individual animals, (r=-.349, p<.001), followed by their perceived role in regulation of wildlife, (r=-.289, p<.001); in entertainment, (r=-.231, p<.001); in scientific research, (r=-.209, p<.01); and in conservation, r(240)=-.206, p<.01. Therefore, it is possible to conclude that hypothesis 2i was not confirmed in the current study, since in most cases there is a *negative* association between level of education and agreement with the justifications for having animal-based attractions.

The examination of the association of participants' level of education with the perceived importance of the conditions for ethical operation of animal-based attractions reveals a similar

Table 25
Spearman's rho Correlations between Ethical Evaluation of Animal-Based Attractions and Education and Income Level

	Level of Education	Income Level
Justifications for Having Animal-Based Attractions		
Entertainment	**-.231****	.032
Family-Oriented Experience	-.073	.042
Conservation	**-.206****	-.116
Education	-.106	-.094
Scientific Research	**-.209****	**-.153***
Alternative to Nature	-.067	.064
Benefits to Individual Animals	**-.349****	-.097
Regulations of Wildlife	**-.289****	-.117
Driving Forces for Ethical Animal-Based Attractions		
Public Opinion	**-.134***	.057
Legal System and Institutional Supervision	**-.240****	-.074
Conditions for Ethical Operation of Animal-Based Attractions		
Natural Behavior of Animals	**-.135***	-.065
Natural Environment	**-.162***	**-.144***
Training Methods	**-.126***	**-.140***
The Concept of Fairness	-.041	-.033
Safety	-.113	.005
Visitors' Behavior	**-.150***	-.093
Treatment of Animals	-.070	-.099
Zoo Keepers' Background and Behavior	-.045	**-.144***
Displayed Animals' Origin	-.064	**-.223****

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

picture, although a more moderate one. Statistically significant negative correlations were found between education and the perceived importance of the natural behavior of animals, (r=-.135, p<.05); natural environment, (r=-.162, p<.05); training methods,(r=-.126, p<.05); and visitors'

behavior, (r=-.150, p<.05). In light of these findings, it can be concluded that hypothesis 2j was not confirmed.

Finally, statistically significant negative correlations also were found between level of education and beliefs regarding the driving forces for having ethical animal-based attractions. The strongest association was between education and the belief in legal system and institutional supervision, (r=-.240, p<.001), followed by the belief in public opinion, (r=-.134, p<.05).

Hypotheses 2k and 2l

Hypothesis 2k: Pet owners will attribute higher importance than people who do not own pets to any of the general arguments in favor of the existence of animal-based attractions, including the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 2l: Pet owners will assign higher importance than people who do not own pets to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Pearson correlation coefficients were computed to determine whether there were associations between the number of pets and the ethical evaluation of animal-based attractions (see Table 24). As can be seen, the only statistically significant—negative—correlation was between the number of pets and the perceived role of animal-based attractions as regulation of wildlife, (r=-.125, p=.048). Therefore, it is possible to conclude that hypotheses 2k and 2l were not confirmed.

Table 26
Ethical Evaluations of Animal-Based Attractions by Marital Status: One-way ANOVA

	Single Mean (SD)	Married Mean (SD)	Other Mean (SD)	F-value	Sig
Justifications for Having Animal-Based Attractions[1]					
Entertainment	3.27 (1.01)	3.49 (.85)	3.61 (.87)	2.191	.114
Family-Oriented Experience	3.78 (.94)	4.00 (.75)	4.16 (.97)	2.699	.069
Conservation	4.00 (.81)	3.97 (.77)	3.97 (.87)	.043	.958
Education	3.89 (.84)	3.88 (.70)	3.77 (.95)	.226	.798
Scientific Research	3.47 (1.01)	3.36 (.98)	3.48 (1.07)	.382	.683
Alternative to Nature	3.73 (.91)	3.96 (.67)	3.89 (.98)	2.263	.106
Benefits to Individual Animals	3.02 (1.09)	3.03 (1.02)	2.98 (1.28)	.020	.980
Regulations of Wildlife	3.11 (1.20)	2.95 (1.23)	2.86 (1.28)	.626	.536
Driving Forces for Ethical Animal-Based Attractions[1]					
Public Opinion	3.67 (.79)	3.79 (.70)	3.58 (.75)	1.126	.326
Legal System and Institutional Supervision	3.71 (.83)	3.72 (.77)	3.71 (.68)	.007	.993
Conditions for Ethical Operation of Animal-Based Attractions[2]					
Natural Behavior of Animals	4.24 (1.04)	4.26 (.92)	3.84 (1.36)	1.603	.203
Natural Environment	4.37 (.99)	4.37 (.93)	3.93 (1.47)	1.889	.153
Training Methods	4.47 (1.03)	4.38 (.98)	4.14 (1.41)	.966	.382
The Concept of Fairness	3.88 (1.31)	4.00 (1.19)	3.64 (1.29)	.875	.418
Safety	4.32 (1.04)	4.21 (1.11)	3.75 (1.36)	2.369	.096

	Single Mean (SD)	Married Mean (SD)	Other Mean (SD)	F-value	Sig
Visitors' Behavior	4.50 (.97)	4.37 (1.03)	3.93 (1.37)	2.794	.063
Treatment of Animals	4.64 (1.00)	4.57 (1.00)	4.27 (1.39)	1.109	.332
Zoo Keepers' Background and Behavior	4.59 (.99)	4.46 (1.04)	4.23 (1.38)	1.167	.313
Displayed Animals' Origin	4.18 (1.12)	3.95 (1.17)	3.91 (1.44)	1.175	.311

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at p≤.05 significant level.
Note: F and significant level are presented for the initial One–Way ANOVA analysis. Significant differences in the means between pairs of the three loyalty segments (no previous visits, one previous visit, multiple visits) based on the Scheffe test are indicated by the letters a, b or c. Pairs of means that do not have the same letter are significantly different whereas those pairs of means that have the same superscript are not significantly different.

Other-Related Tests

Ethical Evaluation by Marital Status

A one-way ANOVA test showed no significant differences in the ethical evaluation of animal-based attractions based on the tourist's marital status (see Table 26). No statistically significant differences were found between the three groups.

Ethical Evaluation by Country of Origin

An independent sample t test was conducted to determine whether there are differences in the ethical evaluation of animal-based attractions between U.S. and international tourists. As can be seen in Table 27, the test was significantly significant with regard to the perceived role of animal-based attractions as family-oriented experiences, (t=2.678, p=.008), and to their benefits to individual animals, (t=2.499, p=.013). U.S. visitors assigned higher importance than

Table 27
Ethical Evaluations of Animal-Based Attractions by Country of Origin: Independent Samples T-Tests

	U.S. Visitors Mean (SD)	International Visitors Mean (SD)	t-value	Sig
Justifications for Having Animal-Based Attractions[1]				
Entertainment	3.49 (.93)	3.27 (.86)	1.771	.078
Family-Oriented Experience	4.03 (.82)	3.72 (.90)	2.678	**.008**
Conservation	4.01 (.82)	3.94 (.74)	.670	.503
Education	3.92 (.79)	3.80 (.71)	1.209	.228
Scientific Research	3.48 (1.01)	3.31 (.96)	1.264	.208
Alternative to Nature	3.97 (.81)	3.70 (.76)	2.499	**.013**
Benefits to Individual Animals	3.02 (1.11)	3.03 (.98)	-.090	.928
Regulations of Wildlife	3.05 (1.25)	2.93 (1.16)	.776	.438
Driving Forces for Ethical Animal-Based Attractions[1]				
Public Opinion	3.77 (.77)	3.63 (.71)	1.406	.161
Legal System and Institutional Supervision	3.71 (.83)	3.72 (.70)	-.120	.904
Conditions for Ethical Operation of Animal-Based Attractions[2]				
Natural Behavior of Animals	4.15 (1.00)	4.34 (1.04)	-1.378	.170
Natural Environment	4.28 (1.04)	4.42 (.98)	-1.027	.305
Training Methods	4.36 (1.04)	4.45 (1.05)	-.592	.554
The Concept of Fairness	3.87 (1.26)	3.99 (1.23)	-.676	.500
Safety	4.13 (1.14)	4.35 (1.06)	-1.469	.143
Visitors' Behavior	4.35 (1.08)	4.44 (.99)	-.610	.543
Treatment of Animals	4.54 (1.08)	4.62 (.99)	-.606	.545
Zoo Keepers' Background and Behavior	4.46 (1.09)	4.56 (1.00)	-.722	.471
Displayed Animals' Origin	3.98 (1.23)	4.15 (1.08)	-1.071	.285

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.

international tourists to both the attractions' characteristic as family-oriented experiences and to their benefits to individual animals.

Ethical Evaluation by Income Level

To examine the association between level of income and the ethical evaluation of animal-based attractions, Spearman's rho correlation coefficients were calculated (see Table 25). With regard to the justifications for having animal-based attractions, the only one that was statistically significant, in a negative direction, was with the perceived role of the attractions in scientific research, ($r=-.153$, $p<.05$). With regard to the conditions for having ethical animal-based attractions, the strongest significant correlation was found between income and the perceived importance of the displayed animals' origin, ($r=-.223$, $p<.01$), followed by zoo keepers' background and behavior, ($r=-.144$, $p<.05$); natural environment, ($r=-.144$, $p<.05$); and training methods, ($r=-.140$, $p<.05$). No statistically significant correlations were found between level of income and any of the driving forces for having ethical animal-based attractions.

Ethical Evaluation by Ethnicity

Independent sample t tests were performed to determine whether there are differences in the ethical evaluation of animal-based attractions on the basis of ethnicity. As can be seen in Table 28, the only statistically significant difference that was found was with regard to the perceived importance of the natural behavior of animals, ($t=-2.158$, $p=.032$). On average, Whites ($M=4.26$) perceived this attribute as more important than non-Whites ($M=3.83$).

Ethical Evaluation by Animal Welfare-Related Behavior

Independent sample t-tests were conducted to investigate whether there are differences in the ethical evaluation of animal-based attractions between tourists who donated money to animal-welfare causes and those who did not (see Table 29). No statistically significant

Table 28
Ethical Evaluations of Animal-Based Attractions by Ethnicity: Independent Samples T-Tests

	White Mean (SD)	Other than White Mean (SD)	t-value	Sig
Justifications for Having Animal-Based Attractions[1]				
Entertainment	3.44 (.88)	3.39 (1.09)	-.322	.748
Family-Oriented Experience	3.98 (.80)	3.69 (1.08)	-1.449	.156
Conservation	4.05 (.72)	3.67 (1.05)	-1.912	.065
Education	3.90 (.73)	3.82 (.96)	-.550	.583
Scientific Research	3.43 (.96)	3.35 (1.21)	-.389	.697
Alternative to Nature	3.89 (.77)	3.74 (1.03)	-.917	.360
Benefits to Individual Animals	3.05 (1.03)	2.91 (1.29)	-.722	.471
Regulations of Wildlife	3.05 (1.18)	2.78 (1.41)	-1.035	.307
Driving Forces for Ethical Animal-Based Attractions[1]				
Public Opinion	3.75 (.70)	3.58 (1.04)	-.872	.389
Legal System and Institutional Supervision	3.72 (.74)	3.71 (1.08)	-.048	.962
Conditions for Ethical Operation of Animal-Based Attractions[2]				
Natural Behavior of Animals	4.26 (.97)	3.83 (1.27)	-2.158	**.032**
Natural Environment	4.37 (.95)	4.09 (1.28)	-1.497	.136
Training Methods	4.42 (1.00)	4.19 (1.30)	-1.182	.238
The Concept of Fairness	3.97 (1.20)	3.63 (1.52)	-1.216	.232
Safety	4.26 (1.09)	3.89 (1.30)	-1.737	.084
Visitors' Behavior	4.42 (1.00)	4.13 (1.29)	-1.489	.138
Treatment of Animals	4.58 (1.01)	4.38 (1.34)	-1.050	.295
Zoo Keepers' Background and Behavior	4.50 (1.02)	4.34 (1.33)	-.774	.440
Displayed Animals' Origin	4.01 (1.18)	4.03 (1.23)	.074	.942

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at p≤.05 significant level.

differences were found with regard to any of the justifications for having animal-based attractions. However, donors attributed greater importance to fairness in comparison to the non-

Table 29
Ethical Evaluation of Animal-Based Attractions by Donation to Animal-Welfare Causes: Independent Samples T-Tests

	Donors Mean (SD)	Non-Donors Mean (SD)	t-value	Sig
Justifications for Having Animal-Based Attractions[1]				
Entertainment	3.32 (.98)	3.52 (.84)	-1.686	.093
Family-Oriented Experience	3.99 (.85)	3.85 (.88)	1.275	.203
Conservation	4.03 (.80)	3.92 (.78)	1.066	.287
Education	3.89 (.81)	3.85 (.76)	.325	.746
Scientific Research	3.43 (1.00)	3.40 (1.00)	.241	.810
Alternative to Nature	3.92 (.77)	3.80 (.86)	1.079	.282
Benefits to Individual Animals	2.95 (1.05)	3.14 (1.09)	-1.373	.171
Regulations of Wildlife	2.97 (1.19)	3.06 (1.27)	-.545	.586
Driving Forces for Ethical Animal-Based Attractions[1]				
Public Opinion	3.76 (.75)	3.67 (.74)	.996	.320
Legal System and Institutional Supervision	3.82 (.75)	3.58 (.82)	2.404	**.017**
Conditions for Ethical Operation of Animal-Based Attractions[2]				
Natural Behavior of Animals	4.33 (1.03)	4.08 (.99)	1.860	.064
Natural Environment	4.42 (1.02)	4.22 (1.01)	1.575	.116
Training Methods	4.47 (1.04)	4.30 (1.05)	1.215	.226
The Concept of Fairness	4.12 (1.20)	3.64 (1.28)	3.060	**.002**
Safety	4.22 (1.13)	4.22 (1.10)	.021	.983
Visitors' Behavior	4.47 (1.06)	4.28 (1.03)	1.386	.167
Treatment of Animals	4.62 (1.05)	4.51 (1.03)	.827	.409
Zoo Keepers' Background and Behavior	4.53 (1.07)	4.45 (1.04)	.583	.561
Displayed Animals' Origin	4.15 (1.17)	3.88 (1.18)	1.835	.068

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.

donors with regard to the conditions for ethical operation of animal-based attractions, (t=3.060, p=.002). In addition, donors expressed higher trust than non-donors in the legal system and

Table 30
Ethical Evaluation of Animal-Based Attractions by Membership in Animal-Welfare Organization: Independent Samples-T-Tests

	Members Mean (SD)	Non-Members Mean (SD)	t-value	Sig
Justifications for Having Animal-Based Attractions[1]				
Entertainment	3.28 (1.13)	3.43 (.90)	-.665	.511
Family-Oriented Experience	3.88 (1.10)	3.93 (.83)	-.298	.766
Conservation	3.95 (.74)	3.99 (.80)	-.263	.793
Education	3.88 (.90)	3.87 (.77)	.030	.976
Scientific Research	3.37 (1.04)	3.43 (1.00)	-.308	.759
Alternative to Nature	3.89 (.92)	3.87 (.79)	.121	.904
Benefits to Individual Animals	2.93 (1.11)	3.05 (1.06)	-.542	.588
Regulations of Wildlife	2.87 (1.22)	3.03 (1.22)	-.676	.500
Driving Forces for Ethical Animal-Based Attractions[1]				
Public Opinion	3.63 (.79)	3.73 (.74)	-.695	.488
Legal System and Institutional Supervision	3.94 (.63)	3.69 (.80)	1.697	.091
Conditions for Ethical Operation of Animal-Based Attractions[2]				
Natural Behavior of Animals	4.39 (.88)	3.20 (1.03)	.944	.346
Natural Environment	4.56 (.93)	4.31 (1.03)	1.273	.204
Training Methods	4.58 (1.02)	4.37 (1.05)	1.041	.299
The Concept of Fairness	4.40 (1.13)	3.86 (1.26)	2.244	**.026**
Safety	4.36 (1.10)	4.20 (1.12)	.743	.458
Visitors' Behavior	4.58 (1.03)	4.36 (1.05)	1.090	.277
Treatment of Animals	4.63 (1.13)	4.57 (1.04)	.329	.742
Zoo Keepers' Background and Behavior	4.63 (1.03)	4.48 (1.06)	.748	.455
Displayed Animals' Origin	4.27 (1.26)	4.00 (1.17)	1.143	.254

1. Scale ranges from 1 (strongly disagree) to 5 (strongly agree).
2. Scale ranges from 1 (very unimportant) to 5 (very important).
Bold items are at $p \leq .05$ significant level.

institutional supervision as a driving force for ethical operation of animal-based attractions, (t=2.404, p=.017).

Similarly, the independent sample t-tests show no differences between members and non-members of animal-welfare organizations related to any of the justifications for having animal-based attractions (see Table 30). Correspondingly, members ascribed higher importance than non-members to the concept of fairness as a condition for ethical operation of animal-based attractions, (t=2.244, p=.026).

Summary

The investigation of ethical evaluation of animal-based attractions by the respondents' profile characteristics reveals some meaningful findings. The most prominent ones are

(1) overall, females tended to grant higher importance to some justifications for having animal-based attractions, to the conditions for ethical operation of animal-based attractions, and to legal and institutional supervision as a driving force for ethical operation;

(2) older tourists ascribed higher importance to the role of animal attractions in entertainment and attributed higher importance to public opinion as a driving force for ethical operation;

(3) number of children is positively associated with viewing animal-based attractions as family-oriented experiences;

(4) tourists with higher education tended to assign lower importance to the justifications for having animal-based attractions and the conditions for ethical operation of the attractions, and to the two driving forces for ethical operation;

(5) people with higher income tended to attribute lower importance to the role of animal-based attractions in scientific research, as well as lower importance to some of the conditions for ethical operation, especially the origin of the displayed animals;

(6) U.S. visitors tended to attribute higher importance to the role of animal-based attractions as family-oriented experience and expressed greater agreement with regard to their benefits to individual animals – than international visitors; and

(7) tourists who donated to animal-welfare causes and members of animal welfare organizations tended to attribute higher importance to the concept of fairness in the operation of animal-based attractions. Donors also expressed greater trust in the legal and institutional supervision as a driving force in the ethical operation of animal-based attractions.

Hypothesis 3

The third group of hypotheses was related to the association between frequency of past visitation to animal-based attractions and the tourists' ethical evaluation of these attractions. Specifically, this section addresses the following hypotheses:

Hypothesis 3a: The more a person visits animal-based attractions the higher the importance he/she will attribute to any of the general arguments in favor of the existence of animal-based attractions, such as the fact that they provide entertainment; that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 3b: The more a person visits animal-based attractions, the higher the importance he/she will assign to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, including public opinion, the legal system and institutional supervision.

Hypothesis 3c: The more a person visits animal-based attractions, the higher the importance he/she will ascribe to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including providing a natural environment that enables natural behavior; controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

Spearman's rho correlation coefficients were computed to determine whether there was a relationship between the frequency of visitation to each of the attraction types and the ethical evaluation of animal-based attractions. The results presented in Table 31 show that statistically significant correlations were detected only in some cases, which can be interpreted as relatively weak relationships. Somewhat unexpectedly, no significant correlations were found between frequency of visits to zoos, aquariums, safari and wildlife parks, and rodeos to the tourists' views regarding any of the justifications for having animal-based attractions, the driving forces for having animal-based attractions, and the conditions for ethical operation of animal-based attractions.

On the other hand, the visitation rate to animal circuses was found to be statistically significant and positively correlated with the perceived roles of attractions in entertainment, (r=.149, p=.011); in education, (r=.127, p=.024); as an alternative to nature, (r=.111, p=.041); benefits to individual animals, (r=.172, p=.003); and as regulation of wildlife, (r=.155, p=.007). In addition, frequency of visitation to animal circuses was negatively correlated with the perceived importance of the natural behavior of animals, (r=-.126, p=.025).

Frequency of visitation to animal theme parks was also statistically significant and positively correlated with most of the justifications for having animal-based attractions, including their roles in entertainment, (r=.116, p=.036); conservation, (r=.170, p=.004); education, (r=.113, p=.039); as an alternative to nature, (r=.167, p=.004); benefits to individual animals, (r=.136, p=.016); and role in regulation of wildlife, (r=.142, p=.012). No statistically significant relationships were found between the rate of visits to circuses and the belief in any of the driving forces or the conditions for ethical operation.

Table 31
Spearman's rho Correlations between Frequency of Visitations and Ethical Evaluation of Animal-Based Attractions

	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bull-fighting	Rodeo
Justifications for Having Animal-Based Attractions								
Entertainment	-.012	-.016	**.149***	-.055	**.116***	**.113***	.062	.029
Family-Oriented Experience	.094	.040	.094	-.018	.096	-.064	.054	.050
Conservation	.087	.061	-.035	.059	**.170****	**-.143***	.082	.069
Education	.081	-.037	**.127***	.006	**.113***	-.089	.028	.019
Scientific Research	.081	.013	.050	-.016	.051	**-.130***	.049	.075
Alternative to Nature	.093	.056	**.111***	-.011	**.167****	-.029	.008	.044
Benefits to Individual Animals	.074	.017	**.172****	-.061	**.136***	.021	.013	.048
Regulations of Wildlife	.036	.035	**.155****	.042	**.142***	.063	-.061	.052
Driving Forces for Ethical Animal-Based Attractions								
Public Opinion	.020	.019	.059	.035	.091	.046	.037	.001
Legal System and Institutional Supervision	.096	.090	.097	-.012	.038	**-.120***	-.029	-.023
Conditions for Ethical Operation of Animal-Based Attractions								
Natural Behavior of Animals	-.014	-.054	**-.126***	.075	.039	**-.139***	-.083	-.034
Natural Environment	-.004	-.032	-.064	.076	.025	**-.132***	-.066	-.021
Training Methods	.024	.021	-.030	.067	.093	**-.146***	-.046	-.039
The Concept of Fairness	.037	.060	-.069	-.017	-.016	**-.116***	**-.119***	-.018
Safety	-.040	-.041	-.075	-.059	-.012	**-.138***	-.055	-.031

	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bull-fighting	Rodeo
Visitors' Behavior	-.009	-.043	-.087	.017	.033	**-.152****	-.027	.020
Treatment of Animals	.020	-.001	-.047	.009	.068	**-.187****	-.084	.006
Zoo Keepers' Background and Behavior	.004	.015	-.055	.049	.060	**-.178****	-.048	-.056
Displayed Animals' Origin	.005	.061	-.028	.023	.053	**-.119***	-.002	-.030

*Significant at the .05 level. **Significant at the .01 level (one-tailed tests).

The attraction type with the most prominent association between visitation to it and ethical evaluation of animal-based attractions was animal racing. Frequency of visits to animal racing was found to be positively related to the attractions' perceived role in entertainment, (r=.113, p=.041), and negatively related to their perceived role in conservation, (r=-.143, p=.013); and in scientific research, (r=-.130, p=.022). The visitation rate for animal racing was also the only one significantly associated, in the negative direction, with the belief in legal system and institutional supervision as a driving force for having ethical animal-based attractions,(r=-.120, p=.030). Finally, it was significantly negatively associated with the perceived importance of each of the conditions for ethical operation, including natural behavior of animals, (r=-.139, p=.015); natural environment, (r=-.132, p=.020); training methods, (r=-.146, p=.011); the concept of fairness, (r=-.116, p=.034); safety, (r=-.138, p=.015); visitors' behavior, (r=-.152, p=.008); treatment of animals, (r=.187, p=.002); zoo keepers' background and behavior, (r=-.178, p=.002); and the origin of the displayed animals, (r=-.119, p=.031).

Frequency of visitation to bullfighting was found to be statistically significantly correlated—in the negative direction—only with the perceived importance of fairness as a condition for ethical operation of animal-based attractions, (r=-.119, p=.062).

In light of the aforementioned findings, it can be concluded that hypothesis 3a received only limited support, and the correlations can be interpreted as relatively weak ones. Hypotheses 3b and 3c were not confirmed in the context of the current study.

Summary

The investigation of the relationship between the frequency of visitation to animal-based

attractions and the ethical evaluation of attractions reveals, at best, a very limited association. A review of the prominent findings raised the following conclusions: (1) the more a person visits animal circuses, the higher the importance he/she attributed to some of the justifications for having animal-based attractions, especially their benefits to individual animals; (2) the more a person visits animal theme parks, the higher the importance he/she attributed to some of the justifications for having animal-based attractions, especially their role in conservation; (3) the more a person visits animal racing, the higher the importance he/she ascribes to the role of attractions in entertainment, and the lower the importance he/she ascribes to their role in conservation and scientific research. In addition, the more a person visits animal racing, the lower his belief in legal and institutional supervision as a driving force for ethical operation, as well as the importance he/she ascribes to each of the conditions for ethical operation of animal-based attractions; and (4) the more a person visits bullfighting, the less he/she attributes importance to the concept of fairness in animal-based attractions. It should be noted that all of the above relationships, although statistically significant, are relatively low.

Hypothesis 4

As was noted in the previous chapter, the fourth group of hypotheses is concerned with the relative importance that tourists assign to the various aspects influencing their ethical evaluation of animal-based attractions. Specifically, this section addresses the following hypotheses:

Hypothesis 4a: People will assign a higher importance to entertainment and recreation than to any other general argument in favor of the existence of animal-based attractions, including the

fact that they contribute to education and scientific research; that they benefit individual animals; that they enable the regulation of wildlife; and that they can be an alternative to nature.

Hypothesis 4b: People will assign higher importance to natural environment and natural behavior than to any other conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, including controlling training methods; ensuring fairness and safety; and monitoring the visitors' behavior.

First, the perceived importance of the general justifications for having animal-based attraction was examined (see Table 32). As can be seen, the perceived role of attractions in wildlife conservation received the highest mean among the justifications (M=3.98, SD=.79), followed by family-oriented experience (M=3.92, SD=.86), education (M=3.87, SD=.78), and alternative to nature (M=3.86, SD=.80). Lower importance was attributed to the role of the attractions in scientific research (M=3.42, SD=.99), entertainment (M=3.41, SD=.92), benefits to individual animals (M=3.03, SD=1.06), and finally regulation of wildlife (M=3.01, SD=1.22). In light of these findings, it is possible to conclude that hypothesis 4a was only partially confirmed. While 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, their role in entertainment was lower in importance in comparison to issues such as conservation, education, and even scientific research.

The perceived importance of the conditions for ethical operation of animal-based attractions is presented in Table 33. Overall, all the conditions received relatively high scores, with the highest one being the treatment of animals (M=4.57, SD=1.04), followed by zoo keepers' background and behavior (M=4.50, SD=1.05), training methods (M=4.39, SD=1.04),

Table 32
Justifications for Having Animal-Based Attractions: Descriptive Statistics

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
Conservation						***3.98 (.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 (.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 (.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 (.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 (.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 (.94)	251

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
Education						***3.87 (.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 (.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 (.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 (.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 (.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 (.98)	250
Alternative to nature						***3.86 (.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 (.88)	251

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
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 (.98)	250
Scientific Research						**3.42 (.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 (.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

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
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

and visitors' behavior (M=4.39, SD=1.04). Lower but still fairly high scores were ascribed also to natural environment (M=4.34, SD=1.02), natural behavior of animals (M=4.22, SD=1.01), and safety (M=4.21, SD=1.11). The attributes that were given the lowest importance were the displayed animals' origin (M=4.04, SD=1.18) and the concept of fairness (M=3.91, SD=1.25). Again, it should be noted that all the scores for this section were exceptionally high. In light of these findings, it is possible to conclude that hypothesis 4b was partially confirmed.

The scores of the belief regarding driving forces for ethical animal-based attractions were investigated as well, and the results are shown in Table 34. As can be seen, both dimensions, public opinion (M=3.72, SD=.75) and legal system and institutional supervision (M=3.71, SD=.78), 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.

Summary

The central findings from the examination of hypothesis 4 are as follows:
(1) the most agreed-upon justifications for having animal-based attractions are their roles in conservation, as family-oriented experiences, in education, and as an alternative to nature. The least accepted justifications were the roles of the attractions as regulation of wildlife, their benefit to individual animals, and their role in entertainment and in scientific research;
(2) the most important conditions for ethical operation of animal-based attractions were the treatment of animals, zoo keepers' background and behavior, training methods, visitors' behavior, and natural environment. The least important conditions were the concept of fairness,

Table 33
Conditions for Ethical Operations of Animal-Based Attractions: Descriptive Statistics

Dimensions and Items	Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	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)	.4% (n=1)	.0% (n=0)	14.7% (n=37)	78.2% (n=197)	4.57 (1.04)	252
Zoo Keepers' Background and Behavior						***4.50 (1.05)***	***252***
That the zoo keepers are educated and are sensitive to the animals	6.7% (n=17)	.4% (n=1)	.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)	.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 attraction display respectful behavior towards the animals	6.7% (n=17)	.4% (n=1)	1.6% (n=4)	25.0% (n=63)	66.3% (n=167)	4.44 (1.06)	251

Dimensions and Items	Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	Mean (SD)	N
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
Natural Environment						***4.34 (1.02)***	***249***
That the animal enclosures are of a 'good size'	6.4% (n=16)	.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)	.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***

Dimensions and Items	Very Unimportant 1	Unimportant 2	Neither Important nor Unimportant 3	Important 4	Very Important 5	Mean (SD)	N
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 (1.17)***	***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

Table 34
Driving Forces for Ethical Operation of Animal-Based attractions: Descriptive Statistics

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
Public Opinion						***3.72 (.75)***	***250***
Increasing public awareness regarding animal 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 (.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 (.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 (.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 (.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 (.86)	250

Dimensions and Items	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Mean (SD)	N
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 (.92)	250

whether the displayed animals are captures or rescued, safety, and the natural behavior of animals; and

(3) the importance of the two driving forces for ethical animal-based attractions were ranked almost identically.

Hypothesis 5

The fifth group of hypotheses is related to the association of the ethical evaluation of animal-based attractions with the attitudes toward such attractions. More specifically, this section addresses the following hypotheses:

Hypothesis 5a: The higher the importance given to any of the general arguments in favor of the existence of animal-based attractions, the more positive the attitudes a person will have towards zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

Hypothesis 5b: The higher the importance given to any of the general arguments in favor of the existence of animal-based attractions, the more negative the attitudes a person will have toward animal circuses, horse racing, bullfighting, and rodeos.

Hypothesis 5c: The higher the importance given to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, the more positive the attitudes a person will have toward zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

Hypothesis 5d: The higher the importance given to any of the driving forces believed to cause the attractions to treat the exhibited animals in an ethically responsible way, the more negative the attitudes a person will have towards animal circuses, horse racing, bullfighting, and rodeos.

Hypothesis 5e: The higher the importance given to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, the more positive the attitudes a person will have towards zoos, aquariums, safaris, wildlife parks and amusement animal attractions.

Hypothesis 5f: The higher the importance given to any of the conditions that need to be fulfilled in order for an animal-based attraction to be considered ethical, the more negative the attitudes a person will have towards animal circuses, horse racing, bullfighting, and rodeos.

As can be seen in Table 35, overall the most ethically acceptable attraction among the participants was safari or wildlife park (M=4.15, SD=.78), followed by aquarium (M=4.13, SD=.78), zoo (M=4.03, SD=.83), and animal theme park (M=3.74, SD=1.00). 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 (M=1.84, SD=1.03), followed by animal racing (M=2.52, SD=1.21), rodeo (M=2.59, SD=1.20), and animal circus (M=2.80, SD=1.21). 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).

To investigate the association between ethical evaluation and attitudes toward the various animal-based attractions, at the first stage, Pearson correlation coefficients were computed (see Table 36). 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. Attitudes toward zoos were most strongly related to the perceived role of animal-based attractions as an alternative to nature, ($r=.331$, $p<.001$); education, ($r=.323$, $p<.001$); and benefits to individual animals, ($r=.287$, $p<.001$). Attitudes toward aquariums were slightly less associated with the justifications; the most prominent correlations were with the attractions' role as alternative to nature, ($r=.296$, $p<.001$); education, ($r=.257$, $p<.001$); and scientific research, ($r=.240$, $p<.001$). Conversely, attitudes toward animal circuses had the highest correlation with the perceived role of animal-based attractions in entertainment, ($r=.413$, $p<.001$), followed by their role as an alternative to nature, ($r=.250$, $p<.001$); and as family-oriented experience, ($r=.241$, $p<.001$). Safaris or wildlife parks, on the other hand, had the highest correlation with conservation, ($r=.336$, $p<.001$); followed by

Table 35
Participants' Ethical Attitudes toward Animal-Based Attractions: Descriptive Statistics

	Totally Unacceptable 1	Unacceptable 2	Neither Acceptable nor Unacceptable 3	Acceptable 4	Totally Acceptable 5	Mean (SD)
Safari or Wildlife Park	1.6% (n=4)	1.6% (n=4)	8.9% (n=22)	55.6% (n=138)	32.3% (n=80)	4.15 (.78)
Aquarium	1.6% (n=4)	2.8% (n=7)	6.5% (n=16)	59.3% (n=147)	29.8% (n=74)	4.13 (.78)
Zoo	2.0% (n=5)	4.0% (n=10)	8.8% (n=22)	59.6% (n=149)	25.6% (n=64)	4.03 (.83)
Animal Theme Park	5.2% (n=13)	4.8% (n=12)	20.2% (n=50)	50.4% (n=125)	19.4% (n=48)	3.74 (1.00)
Animal Circus	17.2% (n=43)	26.0% (n=65)	24.0% (n=60)	25.6% (n=64)	7.2% (n=18)	2.80 (1.21)
Rodeo	23.6% (n=59)	24.8% (n=62)	25.2% (n=63)	21.6% (n=54)	4.8% (n=12)	2.59 (1.20)
Animal Racing	26.0% (n=65)	25.6% (n=64)	22.8% (n=57)	21.2% (n=53)	4.4% (n=11)	2.52 (1.21)
Bullfighting	47.6% (n=119)	32.0% (n=80)	11.6% (n=29)	6.0% (n=15)	2.8% (n=7)	1.84 (1.03)

education, (r=.314, p<.001); and scientific research, (r=.256, p<.001). Similarly to attitudes regarding animal circuses, attitudes toward animal theme parks had the strongest correlation with entertainment, (r=.380, p<.001). Other prominent correlations of attitudes toward animal theme parks were with the perceived role of animal-based attractions as an alternative to nature, (r=.309, p<.001); and education, (r=.280, p<.001).

In the cases of attitudes toward animal racing, bullfighting, and rodeo, statistically significant correlations were found only to a few of the justifications for having animal-based attractions. Animal racing was positively associated with the role of attractions in entertainment, (r=.152, p=.019); and negatively with education, (r=-.125, p=.051). Attitudes toward bullfighting were only positively associated with entertainment, (r=.323, p<.001); and attitudes toward rodeos were positively associated with both entertainment, (r=.281, p<.001); and family-oriented experience, (r=.128, p=.043). It should be noted that the aforementioned correlations can be interpreted as relatively low. From reviewing the aforementioned findings, it can be concluded that hypothesis 5a was confirmed, while hypothesis 5b was not confirmed.

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 36, within this dimension, public opinion had the highest statistically significant correlations with attitudes toward zoos, (r=.224, p<.001); aquariums, (r=.214, p=.001); animal circuses, (r=.182, p=.004); safaris or wildlife parks, (r=.244, p<.001); and animal theme parks, (r=.234, p<.001); all in the positive direction. The belief in the legal system and institutional supervision as a driving force was

Table 36
Pearson Correlations between Ethical evaluation of and Attitudes Towards Animal-Based Attractions

Justifications for Having Animal-Based Attractions	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bullfighting	Rodeo
Entertainment	**.285****	**.228****	**.413****	**.170****	**.380****	**.152****	**.206****	**.281****
Family-Oriented Experience	**.252****	**.226****	**.241****	**.224****	**.208****	-.070	.002	**.128***
Conservation	**.222****	**.197****	**.108***	**.336****	**.221****	-.069	-.045	-.032
Education	**.323****	**.257****	**.164****	**.314****	**.280****	**-.125***	-.034	.056
Scientific Research	**.225****	**.240****	**.218****	**.256****	**.222****	.022	.083	.106
Alternative to Nature	**.331****	**.296****	**.250****	**.235****	**.309****	-.105	.015	.094
Benefits to Individual Animals	**.287****	**.193****	**.228****	**.222****	**.201****	-.071	.038	.016
Regulations of Wildlife	**.264****	**.240****	**.224****	**.195****	**.259****	-.010	.053	.043
Driving Forces for Ethical Animal-Based Attractions								
Public Opinion	**.224****	**.214****	**.182****	**.244****	**.234****	.026	-.013	.069
Legal System and Institutional Supervision	.116	**.130***	.095	**.188****	.090	-.072	-.068	-.028
Conditions for Ethical Operation of Animal-Based Attractions								
Natural Behavior of Animals	.017	**.141***	-.047	**.146***	.044	-.067	-.069	.016
Natural Environment	.045	**.149***	-.059	.100	-.006	-.084	-.102	-.031
Training Methods	.066	**.165****	-.054	.097	.016	-.095	-.081	.001
The Concept of Fairness	-.013	.083	-.021	.105	-.012	-.078	**-.132***	-.043
Safety	**.160***	**.211****	.044	**.190****	**.127***	-.040	.010	.087

Justifications for Having Animal-Based Attractions	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bullfighting	Rodeo
Visitors' Behavior	.039	**.136***	-.031	.122	.033	-.055	-.052	.025
Treatment of Animals	.033	**.144***	-.032	.113	.045	-.041	-.055	.028
Zoo Keepers' Background and Behavior	.007	.105	-.088	.085	-.005	-.102	-.110	-.030
Displayed Animals' Origin	-.059	.035	-.121	.082	.010	-.119	-.094	-.065

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

also positively significantly associated (yet to a lesser degree than public opinion) with attitudes toward aquariums, (r=.130, p=.042); and safaris or wildlife parks, (r=.188, p=.003). Attitudes toward animal racing, bullfighting, and rodeo were not found to be significantly related to any of the driving forces. Thus, it is possible to conclude that hypothesis 5c received only partial confirmation, while hypothesis 5d was not confirmed.

With regard to the conditions for having ethical animal-based attractions, the most marked significant correlation was between safety and attitudes toward aquariums, (r=.211, p=.001). 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, (r=.160, p=.012); and r=.127, p=.047; respectively). Attitude toward safaris or wildlife parks was also correlated with safety, r(245)=.190, p=.003, and with natural behavior of animals, (r=.146, p=.023). 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. No statistically significant correlations were found between any of the conditions and attitudes toward animal circuses, animal racing, and rodeo. Consequently, it is possible to conclude that both hypotheses 5e and 5f received only limited support.

The second stage in analyzing the relationship between ethical evaluation and attitudes toward animal-based attractions was to conduct stepwise multiple regression analyses such that the attitudes toward each of the sites were regressed on the dimensions in each of the three constructs. For each regression analysis, VIF and tolerance values indicated no signs for multi-collinearity (note that a VIF value smaller than 5.0 and a tolerance value larger than 0.2 indicate no collinearity [Field, 2005; Hutcheson & Sofroniou, 1999]). As can be seen in Table 37, it was found that the two independent variables of education and benefits predicted 14.4% of the

variance in the ethical attitudes toward zoos. Beta coefficients indicate that the justification of education was the most significant predictor of attitudes toward zoos (β=.238, p=.002), followed by benefits to individual animals (β=.191, p=.014). With regard to aquariums (see Table 38), it was found that the independent variables of alternative to nature and family-oriented experience predicted 14.9% of the variance in the attitudes toward aquariums. The most significant predictor of attitudes toward aquariums was the justification of alternative to nature (β=.242, p=.002), followed by family-oriented experience (β=.196, p=.011). Note that in cases of both zoos and

Table 37
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Zoo

	R^2	B	β	T	p	VIF*	Tolerance**
Education	.119	.237	.238	3.095	.002	1.451	.689
Benefits to Individual Animals	.144	.139	.191	2.487	.014	1.451	.689

R=.380, R^2=.144, Durbin-Watson=1.999, F=17.672 (sig<.001)

$Y_D = b_0 + b_1x_1 + b_2x_2$

where:

Y_D = Ethical attitude toward zoo

x_1 = Education

x_2 = Benefits to individual animals

Table 38
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Aquarium

	R^2	B	β	T	p	VIF	Tolerance
Alternative to Nature	.122	.201	.242	3.166	.002	1.435	.697
Family-Oriented Experience	.149	.153	.196	2.563	.011	1.435	.697

R=.386, R^2=.149, Durbin-Watson=2.058, F=18.319 (sig<.001)

$Y_D = b_0 + b_1x_1 + b_2x_2$

where:

Y_D = Ethical attitude toward aquarium

x_1 = Alternative to nature

x_2 = Family-oriented experience

aquariums, the predictors of the attitudes were the perceived importance of justifications for having animal-based attractions.

The ethical evaluation of animal-based attractions had a higher prediction power in the case of animal circuses (see Table 39). It was found that the two independent variables of entertainment and displayed animals' origin predicted 23.4% of the variance in the attitudes toward animal circuses. Beta scores indicate that the justification of entertainment was the most significant predictor of attitudes toward animal circus (β=.470, p<.001), followed by the perceived importance of the displayed animals' origin (rescued vs. captured), (β=-.199, p<.001). Note that with regard to the latter, the coefficient sign is negative. Next, with regard to safaris and wildlife parks, it was detected that the independent variable of conservation predicted 13.5% of the variance in the attitudes toward the attraction (see Table 40). Conservation was the only significant predictor of attitudes toward safaris or wildlife parks (β=.368, p<.001).

Table 39
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Circus

	R^2	B	β	T	p	VIF	Tolerance
Entertainment	.196	.602	.470	7.709	<.001	1.020	.980
Animal Origin	.234	-.207	-.199	-3.269	<.001	1.020	.980

R=.484, R^2=.234, Durbin-Watson=1.947, F=32.162 (sig<.001)

$Y_D = b_0 + b_1x_1 - b_2x_2$

where:

Y_D = Ethical attitude toward circus

x_1 = Entertainment

x_2 = Displayed animals' origin

Table 41 shows the regression analysis results for animal theme parks. As can be seen, 21.1% of the variance in the attitudes toward animal theme parks can be explained by the independent variables of entertainment, natural environment, safety, and conservation. The most

Table 40
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Safari or Wildlife Park

	R^2	B	β	T	p	VIF	Tolerance
Conservation	.135	.326	.368	5.731	<.000	1.000	1.000

R=.368, R^2=.135, Durbin-Watson=2.086, F=32.845 (sig<.001)

$Y_D = b_0 + b_1 x_1$

where:

Y_D = Ethical attitude toward safari or wildlife park

x_1 = Conservation

Table 41
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Animal Theme Park

	R^2	B	β	T	p	VIF	Tolerance
Entertainment	.144	.300	.297	4.438	<.001	1.172	.832
Natural Environment	.183	-.306	-.317	-3.484	.001	2.160	.463
Safety	.201	.195	.227	2.532	.012	2.100	.476
Conservation	.211	.242	.205	2.953	.004	1.254	.798

R=.459, R^2=.211, Durbin-Watson=1.904, F=13.768 (sig<.001)

YD = b0 + b1x1 - b2x2 + b3x3 + b4x4

where:

Y_D = Ethical attitude toward animal theme park

x_1 = Entertainment

x_2 = Natural environment

x_3 = Safety

x_4 = conservation

significant predictor (with a negative coefficient sign) was the perceived importance of natural environment (β=-.306, p=.001), followed by entertainment (β=.297, p<.001), the perceived importance of safety (β=.227, p=.012), and conservation (β=.205, p=.004). Subsequently, it was found that the independent variables of entertainment, education, and the perceived importance of the displayed animals' origin predicted 12.4% of the variance in the attitudes toward animal racing (see Table 42). Beta scores indicate that entertainment was the most significant predictor

(β=.325, p<.001), followed by education (β=-.251, p=.001) and the displayed animals' origin (β=-.157, p=.019).

Table 42
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Animal Racing

	R^2	B	β	T	p	VIF	Tolerance
Entertainment	.036	.420	.325	4.509	<.001	1.241	.806
Education	.101	-.394	-.251	-3.441	.001	1.275	.785
Animal Origin	.124	-.168	-.157	-2.362	.019	1.058	.945

R=.352, R^2=.124, Durbin-Watson=1.838, F=9.869 (sig<.001)

$Y_D = b_0 + b_1x_1 - b_2x_2 - b_3x_3$

where:

Y_D = Ethical attitude toward animal racing

x_1 = Entertainment

x_2 = Education

x_3 = Displayed animals' origin

The results presented in Table 43 show that only 8.3% of the variance in the attitudes toward bullfighting can be explained by the independent variables of entertainment, fairness, and education. The most significant predictor was entertainment (β=.279, p<.001), followed by education (β=-.147, p=.048) and the perceived importance of fairness (β=-.139, p=.038) such that the last coefficient of the last two were negative. Finally, it was found that the independent variables of entertainment and benefits to individual animals predicted 11.1% of the variance in the attitudes toward rodeos (see Table 44). The most significant predictor was entertainment (β=.388, p<.001), followed by benefits to individual animals (β=-.368, p=.015) such that the latter has a negative coefficient value.

Table 43
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Bullfighting

	R^2	B	β	T	p	VIF	Tolerance
Entertainment	.042	.301	.279	3.789	<.001	1.240	.806
Fairness	.065	-.114	-.139	-2.087	.038	1.018	.982
Education	.083	-.193	-.147	-1.988	.048	1.256	.796

R=.287, R^2=.083, Durbin-Watson=1.728, F=6.296 (sig<.001)

$Y_D = b_0 + b_1x_1 - b_2x_2 - b_3x_3$

where:

Y_D = Ethical attitude toward bullfighting

x_1 = Entertainment

x_2 = The concept of fairness

x_3 = Education

Table 44
Stepwise Multiple Regression: Dependent Variable = Ethical Attitudes toward Rodeo

	R^2	B	β	T	p	VIF	Tolerance
Entertainment	.085	.496	.388	5.104	<.001	1.362	.734
Benefits to Individual Animals	.111	-.212	-.186	-2.449	.015	1.362	.734

R=.332, R^2=.111, Durbin-Watson=1.737, F=13.047 (sig<.001)

$Y_D = b_0 + b_1x_1 - b_2x_2$

where:

Y_D = Ethical attitude toward rodeo

x_1 = Entertainment

x_2 = Benefits to individual animals

Summary

The investigation of the relationship between ethical evaluation of animal-based attractions and attitudes toward them reveals that significant associations exist between attitudes toward zoos, aquariums, animal circuses, safaris or wildlife parks, and animal theme parks with each of the justifications for having animal-based attractions. The belief in public opinion as a driving force for ethical operation was also found to be significantly related to the attitudes toward these attractions. The belief in legal and institutional supervision, as well as the specific

conditions for ethical operation of animal-based attractions, has relatively weak or no association with attitudes toward these sites. With regard to animal racing, bullfighting, and rodeo, very few associations between attitudes and the evaluation dimensions were found, the most prominent correlation being with entertainment.

Furthermore, the stepwise multiple regression analyses reveal specific predictors for the attitudes toward each of the attraction types:

(1) the higher the importance given to the roles of attractions in education and to their benefits to individual animals, the more positive the attitudes a person had toward zoos;

(2) the higher the importance given to the roles of attractions as an alternative to nature and as a family-oriented experience, the more positive the attitudes a person had towards aquariums;

(3) the higher the importance given to the role of attractions in entertainment and the lower the importance attributed to the animals' origin as a condition for ethical operation, the more positive attitudes a person had toward animal circuses;

(4) the higher agreement given to the role of attractions in conservation, the more positive attitudes a person had toward safaris or wildlife parks;

(5) the higher the importance given to the role of attractions in entertainment, conservation, and the condition of safety, and the lower the importance attributed to the condition of natural environment, the more positive attitudes a person had toward animal theme parks;

(6) the higher the importance given to the role of attractions in entertainment and the lower the importance attributed to their role in education and to the condition of the displayed animals' origin, the more positive attitudes a person had toward animal racing;

(7) the higher the importance given to the role of attractions in entertainment, and the lower the importance attributed to their role in education and to the condition of fairness, the more positive attitudes a person had toward bullfighting; and

(8) the higher the importance given to the role of attractions in entertainment, and the lower the agreement with their benefits to individual animals, the more positive attitudes a person had toward rodeo.

Hypothesis 6

As was discussed in the previous chapter, the last hypothesis is concerned with the association of attitudes toward animal-based attractions and the likelihood of visiting them in the future. More specifically, the hypothesis was as follows:

Hypothesis 6: The more positive attitudes a person has towards a specific animal-based attraction, the more likely he/she to express the intention to visit it in the future.

As can be seen in Table 45, with regard to zoos, aquariums, safaris or wildlife parks, and animal theme parks, more than half of the participants indicated that they were likely or very likely to visit in the future (81.3%, 73.4%, 66.8%, and 59.5%, respectively). Conversely, only a minority indicated a likelihood of visiting animal circuses, animal racing, rodeo, and bullfighting (24.4%, 21.0%, 12.0%, and 6.8%, respectively).

Pearson correlation coefficients were computed to determine whether there are relationships between attitudes toward the attractions and the likelihood of visiting them in the future. The results are presented in Table 46. As can be seen, with regard to each attraction type, statistically significant correlations were found between attitudes and likelihood of visiting,

Table 45
Participants' Likelihood to Visit Animal-Based Attractions in the Future: Descriptive Statistics

	Very Unlikely 1	Not Likely 2	Neither Likely nor Unlikely 3	Likely 4	Very Likely 5	Mean (SD)
Aquarium	6.0% (n=15)	5.6% (n=14)	7.2% (n=18)	46.2% (n=116)	35.1% (n=88)	3.99 (1.09)
Zoo	9.1% (n=23)	8.3% (n=21)	9.1% (n=23)	40.1% (n=101)	33.3% (n=84)	3.80 (1.24)
Safari or Wildlife Park	10.0% (n=25)	11.6% (n=29)	11.6% (n=29)	43.6% (n=109)	23.2% (n=58)	3.58 (1.24)
Animal Theme Park	13.4% (n=33)	12.6% (n=31)	14.6% (n=36)	40.9% (n=101)	18.6% (n=46)	3.39 (1.29)
Animal Circus	36.8% (n=92)	20.0% (n=50)	18.8% (n=47)	16.8% (n=42)	7.6% (n=19)	2.38 (1.33)
Animal Racing	46.8% (n=118)	21.0% (n=53)	11.1% (n=28)	13.9% (n=35)	7.1% (n=18)	2.13 (1.33)
Rodeo	55.8% (n=140)	19.1% (n=48)	13.1% (n=33)	7.2% (n=18)	4.8% (n=12)	1.86 (1.18)
Bullfighting	70.1% (n=176)	15.9% (n=40)	7.2% (n=18)	4.8% (n=12)	2.0% (n=5)	1.53 (.96)

Table 46
Pearson Correlations between Tourists' Ethical Attitudes toward Animal-Based Attractions and the Likelihood to Visit them in the Future

	Ethical Attitudes toward Animal-Based Attractions							
Likelihood to Visit in the Future	Zoo	Aquarium	Animal Circus	Safari or Wildlife Park	Animal Theme Park	Animal Racing	Bullfighting	Rodeo
Zoo	**.371****	.322**	.242**	.171**	.235**	.035	.071	.104
Aquarium	.235**	**.353****	.134*	.242**	.246**	.038	-.022	.030
Animal Circus	.205**	.200**	**.634****	.000	.298**	.282**	.328**	.280**
Safari or Wildlife Park	.152*	.162**	.166**	**.363****	.276**	-.015	.001	.093
Animal Theme Park	.208**	.207**	.291**	.265**	**.467****	.074	.114	.194**
Animal Racing	.058	.084	.315**	.040	.099	**.669****	.346**	.372**
Bullfighting	-.027	-.036	.219**	-.084	.017	.347**	**.589****	.368**
Rodeo	.094	.075	.376**	.046	.226	.341**	.414**	**.606****

*Significant at the .05 level. **Significant at the .001 level (two-tailed tests).

albeit not to the same extent. The strongest correlation was in the case of animal racing, ($r=.669$, $p<.001$), followed by animal circus, ($r=.634$, $p<.001$); rodeo, ($r=.606$, $p<.001$); and bullfighting, ($r=.569$, $p<.001$). On the other hand, lower correlations—yet still significant—between attitudes and likelihood of visiting were found in the cases of animal theme parks, ($r=.467$, $p<.001$); zoos, ($r=.371$, $p<.001$); safaris or wildlife parks, ($r=.363$, $p<.001$); and aquariums, ($r=.353$, $p<.001$). Overall, it is possible to conclude that hypothesis 6 was confirmed in the course of the present investigation.

Summary

The examination of hypothesis 6 reveals significant associations between attitudes toward a certain animal-based attraction and likelihood of visiting it in the future. Nevertheless, this association is firmer and more meaningful in the cases of the more controversial sites, such as animal circuses, animal racing, bullfighting, and rodeo, in comparison to zoos, aquariums, safaris or wildlife parks, and animal theme parks.

Summary

The chapter presented the statistical analyses based on data collected from a sample of 252 visitors to central Florida. Attempts were made to address the research hypotheses and the study questions that guided this research. Comparisons were made between the tourists based on their characteristics with regard to their frequency of visitations to and their ethical evaluation of animal-based attractions. The most prominent aspects in the ethical evaluation of animal-based attractions were identified, as well as the relationship between this evaluation and ethical attitudes toward the sites. Finally, the association between attitudes towards and likelihood of

visiting animal-based attractions was examined as well. The next chapter will review and discuss the findings in light of previous studies, while assessing the contribution of the study to both the tourism and animal rights literature. Managerial and marketing implications will be detailed as well.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

Introduction

The last chapter presents a comprehensive discussion of the study and its findings. This chapter begins with a synopsis of the foundations and goals of the study, including the gaps in the literature it seeks to address. Next, each of the research questions is discussed separately in light of previous research, followed by a conclusion for each of the questions. After an assessment of the contribution of the study to the tourism literature, managerial and marketing recommendations derived from the study's findings are provided. The study's limitations are then presented, along with suggestions for future research. The chapter ends with a short summary.

Overview: Study Background, Rationale, and Objectives

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 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 et al., 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, Davey 2007b; Klenosky & Saunders, 2007; 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 (Plous, 1998; 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 (Agaramoorthy, 2004), disruption of family groups and other sophisticated social structures during capture and transport (Hughes, 2001), and inhumane training methods for animal shows (Carmeli, 2002).

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; Singer, 2002) 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 et al., 2007; Hutchins et al., 1995; Mason, 2000; Snyder et al., 1996). 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 2 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 (Catibog-Sinha, 2008), especially through upgrading of husbandry practices and the incorporation of environmental and behavioral enrichments (see Ben-Ari, 2001; Coe & Lee, 1996; Mellen & MacPhee, 2001).

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., Davey, 2007b; Jiang et al., 2007, Woods, 1998). As a discipline that relies heavily on marketing concepts and is considered in the forefront of the service sectors (Oppermann, 2000), 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., Jiang et al., 2007; 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.

The foundations of the present investigation have their roots in a preliminary study by Shani and Pizam (forthcoming). The study is broadly described in chapter 2. In short, using an exploratory qualitative research design, it was 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. 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.

The resulting research model (see Figure 2) generated six main research questions that were addressed in the present dissertation:

1. Is there a relationship between a visitor's profile and his/her frequency of visits to animal-based attractions?
2. Is there a relationship between a visitor's profile and his/her evaluation of animal-based tourist attractions?
3. Is there a relationship between a visitor's frequency of visits to animal-based attractions and his/her ethical evaluation of those attractions?
4. What are the prominent aspects of ethical evaluation of animal-based attractions?
5. What factors contribute to tourists' attitudes toward animal-based tourist attractions, and what is their relative importance?
6. What is the relationship between visitors' attitudes about animal-based attractions and the likelihood they will visit such attractions in the future?

The research model and the research questions derived from it were examined by an intercept survey, conducted among 252 tourists to the Central Florida area. The visitors were surveyed according to the principle of judgmental sampling, with the intent to ensure heterogeneity in the study sample. As described in chapter 3, the study instrument was tested for reliability and validity, which were found to be at satisfactory levels.

Discussion of Findings

Research Question 1

Is there a relationship between a visitor's profile and his/her frequency of visits to animal-based attractions?

Overall, it was found that visiting animal-based attractions was a widespread leisure activity among the study's participants. Referring to their visits to animal-based attractions in the past five years, almost 50% of the sample indicated that they had visited zoos, aquariums, safari or wildlife parks, and animal theme parks. These findings validate the important role of such sites in tourists' behavior and strengthen the justification for terming them tourist or visitor attractions in their own right (Shackley, 1996; Shani & Pizam, 2008).

Unsurprisingly, not all the attractions share the same popularity, and some of them were revealed as only marginal sites, yet still visited by nontrivial number of people. Almost 21% of the sample had visited animal circuses, 19%, animal racing, and approximately 11%, rodeos. The most unpopular site was found to be bullfighting, with only 4% of the sample reporting a visit in the past five years. Several possible explanations can be made for the relatively low attendance at these sites. It is likely that a major cause of this trend is unfavorable ethical attitudes toward this type of attraction (as will be reported later in this chapter), whose main interest is demonstrations of mastery and control of animals, typically in sporting situations (Bailey, 2007; Cobb, 2003). Another probable reason is the recognized shift in tourist preference to view captive animals in natural-design surroundings (Hughes et al., 2005), in a way that simulates media representations of wildlife (Moscardo, 2007). The documented downfall in the popularity of animal circuses, which is validated in the current investigation as well, can be attributed also to the harsh public relations suffered by circuses in past years, mainly concerning cruel training methods and inhumane living conditions (Carmeli, 2002; Cataldi, 2002). It should be noted, however, that the accessibility of these attractions is more limited than, for example, zoos and aquariums, and this is certainly another major factor in their fairly low visit rates.

Specifically regarding research question 1, it can be concluded that visiting animal-based attractions— at least in the context of the present study—is a cross-sectional leisure activity; that is to say, various sociodemographic groups are not well differentiated based on patterns of visits to animal-based attractions. Note that even in cases where statistically significant differences were found based on respondents' profile characteristics, those differences were for the most part fairly limited. Thus, these findings validate the conclusion by Cain and Meritt (2007) that animal-based attractions are visited by a wide segment of the population. Consequently, animal-based attractions have potential to appeal to a broad segment of the public.

More specifically, it should be noted that no statistically significant differences—or only trivial ones—were found in frequency of visits to animal-based attractions on the basis of participants' gender, marital status, age, or education, despite earlier indications that educated young people and families were associated with greater numbers of visits to zoos and aquariums (Cain and Meritt, 2007). Frequency of visits to zoos and safari parks was found to be positively related to education, but very moderately. A more meaningful positive relationship was found between level of income and visits to animal racing, which is predictable in light of the association of such activities with gambling.

The most conclusive finding for research question 1 is that frequent visitors (three or more visits in the past five years) to zoos, aquariums, and animal circuses were associated with a greater than average number of children under the age of 18, consistent with most previous related studies (e.g., Klenosky & Saunders, 2007; Turley, 2001; Wineman et al., 1996). It should be noted, however, that non-visitors and infrequent visitors (those who had made only one or two visits to these sites) were not significantly differentiated by number of children from frequent visitors, thus implying that visiting animal attractions is not just a simple function of the number

of young children in the family. A related attraction is animal theme parks, which somewhat surprisingly were distinguished from the previously mentioned sites, despite their obvious similarities, by no significant association between frequency of visits and number of children. This result might be due to the special nature of theme parks in general, which are distinct from many other amusement attractions in their appeal to children and adults alike (see King, 1981, 1991). More research is needed to determine the unique features of animal theme parks compared with the more traditional animal-based attractions.

Despite the suggestion by Kellert (1978) that zoo visitors are characterized by strong humanistic attitudes toward animals, also expressed in affection to companion animals in private settings, the study found, for the most part, no noteworthy relationships between frequency of visits to animal-based attractions and ownership of pets. In addition to a very limited association with safari or wildlife parks, it was also found that frequent visitors to animal racing sites had a statistically significant lower average number of pets than non-visitors. Although this finding needs to be verified in future studies, it might suggest that pet owners find these activities, which in many cases incorporate popular companion animals such as dogs and horses, offensive in their treatment of animals. It is interesting to note that tourists who were members of animal-welfare organizations or made donations to such causes were for the most part not differentiated from non-donors and or/nonmembers, in frequency of visits to animal-based attractions. In fact, frequent visitors to zoos had significantly more donors than non-donors. These findings confirm that prominent animal-based attractions have improved their image in regard to animal welfare issues (Ben-Ari, 2001; Catibog-Sinha, 2008), and their role in education and conservation (Mason, 2000; Shackley, 1996), and thus can also appeal to visitors with strong concern for and affiliation with animal-related causes.

Despite some previous indications (e.g., Philipp, 1999), no statistically significant difference in rate of visits to animal-based attractions was found on the basis of ethnicity, but the considerably small number of nonwhites in the sample might have prevented potential differences from emerging. Finally, in regard to country of origin, the only significant difference was in regard to animal theme parks, which had a higher proportion of domestic U.S. visitors than international tourists. This trend is presumably due to the prevalence of animal theme parks in North America compared with other parts of the world (Lück & Jiang, 2007). Even so, visiting animal-based attractions has been revealed to have cross-national appeal, validating previous reports of international trends (Davey, 2007a).

Conclusion

In addressing research question 1, it should be noted that the relationship between a visitor's profile characteristics and his/her frequency of visits to animal-based attractions on the whole was fairly limited. Even in cases of statistically significant differences based on sociodemographic variables, the results typically are moderate and/or inconclusive (despite certain trends that were certainly identified). Consequently, previous conceptions of the nature of visitors to animal-based attractions should be reconsidered and reevaluated, as visitors to such sites seem to encompass wider segments than previously indicated, at least in the case of the current sample. In should be noted, however, that the low rate of visits to attractions such as bullfighting, rodeos, and animal racing might have prevented more statistically significant differences from emerging in relation to these sites.

Research Question 2

Is there a relationship between a visitor's profile and his/her evaluation of animal-based tourist attractions?

As noted, tourists' ethical evaluation of animal-based attractions was examined through three constructs, as suggested by Shani and Pizam (forthcoming): justifications for animal-based attractions, belief in driving forces of ethical animal-based attractions, and conditions for ethical operation of animal-based attractions. Since many of the aspects empirically investigated in the current study have received little or no attention in previous studies, a cross-validation of the results is not possible. Thus, following development of a discipline in animal use in tourism, future studies should confirm the trends identified here.

Undoubtedly, one of the clear findings in regard to research question 2 is a statistically significant gender difference in ethical evaluation of animal-based attractions. Female participants were more likely to express greater agreement with the roles of animal-based attractions in education and scientific research, and with their benefits to individual animals. It is plausible that females have a greater awareness of the educational efforts of animal-based attractions, as they tend to express generally greater interest in animal-related issues (Eldridge & Gluck, 1996), which can also explain their greater confidence in the attractions' usefulness for scientific research. Yet, the most notable gender-related results reflect the greater importance given by women to each of the conditions for ethical operation of animal-based attractions. Thus, women tend to value more than men specific conditions that particular animal-based attractions must meet to be considered ethical, such as allowing the animals' natural behavior, replicating natural environments in the enclosures, and generally gentle and caring treatment of the exhibited animals. These findings are similar to those of extensive earlier non tourism-related

studies that found that females tended to express greater concern for animal welfare and stronger objections to animal cruelty than males (e.g., Kid & Kid, 1989; Henry, 2004; Herzog et al., 1991; Herzog, 2007). Females were also found to believe more strongly than males in the legal system and institutional supervision as driving forces in ethical operation of animal-based attractions. It is possible that their greater awareness of animal welfare issues exposed them to recent developments in animal welfare regulations and enforcement, a prevalent trend in developing countries (Blendford et al., 2002; Singer, 2002) as well as to the considerable influence of animal rights organizations on legislation and policy making (Munro, 2005).

Other socio-demographic variables were found to be less meaningful for explaining differences in ethical evaluation of animal-based attractions. As opposed to the results of an earlier investigation by Davey (2007b), no relationship was found between participant's age and perceived importance of the roles of animal-based attractions, except in the case of an entertainment role, with which older participants agreed more than younger ones. It might be that older tourists agreed more with the role of these attractions in entertainment since this has been the traditional and longest-established function of such sites: mere amusement and distraction (Conway, 1969, 2003). Younger people, on the other hand, might give this role less importance in contemporary animal-based attractions, which nowadays emphasize other roles (e.g., conservation and education) to justify their existence (Mason, 2000). Participants between the ages of 25 and 34 were also found to express less agreement with public opinion as a driving force for ethical animal-based attractions. Contrary to previous indications of younger people being more sensitive to animal welfare issues (Reade & Waran, 1996), the current investigation found no differences between age groups in regard to conditions for ethical operation of animal-based attractions.

Although the present study detected no statistically significant differences in ethical evaluation based on respondents' marital status, the number of children in the family was related to agreement with some of the justifications for the existence of animal-based attractions, the most noticeable being their role in family-oriented experiences, and, to a lesser degree, their role in entertainment. These findings confirm the conclusion of Turley (2001) that these sites have remained in most cases family-oriented recreation sites, despite certain transformations in the nature of animal-based attractions in past decades. Nevertheless, despite the findings of Turley (1998, 2001) that the importance of education is greater when children accompany adults on zoo visits, no relationship was found between having children and perceived importance of the role of animal-based attraction in education. It is possible, in light of these findings, that many adults regard these attractions' educational efforts as highly important only—or mostly—when they physically visit with children, which can explain the dissimilarity between these findings and those of Turley's. The importance of education itself in animal-based attractions might not be associated with number of children in the family, unless the children are present at the sites, a supposition that requires further confirmation in future studies. It is also plausible that animal-based attractions are still regarded more as recreational and entertainment centers for parents with children, rather than as educational institutions, an argument previously made by Jamieson (2006).

In addition, tourists' average number of children in the family—as well as the number of children above the age of 18—was found to be associated with the view of animal-based attractions as providing an alternative to nature. This finding can be explained by the comments of some participants in a preliminary qualitative study (Shani & Pizam, forthcoming) who mentioned the opportunity to let their children watch wildlife, which would otherwise be

inaccessible for financial or security reasons, as one of the main rationalizations for the existence of animal-based attractions in captive settings. A significant relationship was also found between number of children in the family and the perception of public opinion as a driving force for ethical operation of animal-based attractions.

Regarding the conditions for ethical operation of animal-based attractions, no significant relationships were found between their perceived importance and the average number of children in the family. Interesting to note, nonetheless, that a negative significant—albeit moderate—correlation was noticed between the perceived importance of visitor behavior at the sites and the number of children below the age of 18. Thus number of children under the age of 18 is associated with reduced perceived importance of respectful behavior toward the animals at the sites and decreased agreement with supervision of visitors' behavior. It is possible that at least a certain segment of visitors to animal-based attractions prefer to supervise their own children's behavior, or that the attraction should allow children a certain degree of freedom to "go wild" and release energy. Finally, number of children above the age of 18 was weakly associated with the perceived importance of fairness and safety in animal-based attractions; further studies are required to validate these findings and explain their meaning.

Despite the hypotheses that level of education is associated with higher perceived importance of justifications for animal-based attractions and conditions for their ethical operation, the current study found the opposite in most cases. Level of education has the most marked negative association with perceived benefits of animal-based attractions to individual animals, followed by the role of attractions in regulation of nature and in entertainment, scientific research, and education. This is in slight contrast to Davey's (2007b) finding that people with academic education tend to perceive the traditional role of zoos as more important than the

general public does. It is possible—in light of the unambiguous findings of the current investigation—that educated tourists tend to be more skeptical about "good intentions" of animal-based attractions and to reject their justifications for existence. This can also explain the negative correlation between the level of education and the belief in public opinion and legal and institutional supervision as driving forces of ethical animal-based attractions. It might be that the higher one's education, the more he/she does not believe in the ability of organizations or public opinion to generate meaningful change for social causes. Level of education was also negatively correlated—albeit to a lesser degree—with the perceived importance of some of the conditions for ethical operation of animal-based attractions. Further investigations are required to validate and explain these relatively surprising results.

It was also found that number of pets owned was not significantly related to any of the justifications for animal-based attractions (apart from low negative correlation with the role of the attractions in the regulation of wildlife), and the same was found for driving forces of ethical animal-based attractions and perceived importance of the conditions for their ethical operation. These findings are in contrast to earlier indications that pet owners often express higher sensitivity to animal welfare issues (e.g., McPhee et al., 1998; Paul & Serpell, 1993).

Other tests revealed that U.S. visitors expressed greater agreement than international tourists with the roles of animal-based attractions in family-oriented experience and with their benefits to individual animals. Regarding the ethnicity of the participants, the only significant difference between whites and nonwhites was the greater importance given by the former to the natural behavior of animals compared with the latter. It is likely that underrepresentation of non-whites in the study's sample prevented statistically significant results to emerge; nevertheless,

the significant finding can serve as at least partial confirmation of the earlier findings of Kellert (1978, 1980, 1996) that non-whites express considerably lower concern for animals than whites.

Finally, some statistically significant differences in ethical evaluation of animal-based attractions were found between visitors on the basis of animal-related behavior. Donors to animal-welfare causes showed a stronger belief in the legal system and institutional supervision as driving forces for ethical animal-based attractions than non-donors. This finding is understandable since the act of donating money to animal-welfare organizations can be seen as a sign of trust and confidence in their ability to positively influence the state of animal welfare. In addition, the perceived importance of fairness was significantly associated with both donation to and membership in animal welfare organizations. Nevertheless, it can be expected that more significant differences will be revealed on the basis of animal-related behavior than these findings highlight.

Conclusion

In addressing research question 2, it should be noted that some socio-demographic characteristics (e.g., gender, number of children, education) were found to explain some of the differences in ethical evaluation of animal-based attractions, even though not all of them were found in the predicted direction. On the other hand, the study failed to find meaningful differences based on other prominent characteristics such as marital status and number of pets owned. These findings provide some important indications that tourists' socio-demographic variables are meaningful for understanding their ethical evaluation of animal-based attractions, and can provide an initial benchmark with which future studies can be compared. Systematic longitudinal investigation of tourists' ethical evaluation of animal-based attractions by socio-

demographic variables can also indicate trends and developments in attitudes toward such sites. This type of information can be useful to both animal-based attractions and animal rights organizations in assessing the effectiveness of their marketing efforts.

Research Question 3

Is there a relationship between a visitor's frequency of visits to animal-based attractions and his/her ethical evaluation of those attractions?

This research question and the hypotheses derived from it were investigated simply by testing for correlations between frequency of visits to each type of animal-based attraction and each of the aspects of ethical evaluation of animal-based attractions. Although, as mentioned, studies of the relationship between rate of visits and ethical perceptions of animal-based attractions are lacking, it was hypothesized that a positive relationship existed between the factors, mostly on the basis of a study by Davey (2007a), who found that zoo visitors perceived the traditional roles of zoos (i.e., the main justifications for their existence) as being more important than non-visitors did. This finding may imply that the more a person visits animal-based attractions the more he/she is exposed to the various actions taken by the attractions and consequently becomes more convinced of the importance of the attractions' roles. In addition, since Kellert (1978, 1980) found that zoo enthusiasts expressed stronger moralistic attitudes toward animals (strong opposition to exploitation and cruelty) in comparison with the general population, it seemed likely that a positive relationship exists between frequency of visits and perceived importance of conditions for ethical operation of animal-based attractions.

Nevertheless, as noted in the previous chapter, investigation of the relationship between frequency of visits to animal-based attractions and the ethical evaluation of attractions revealed

only a very limited association. Regarding zoos, aquariums, and safari parks, which were among the most popular attractions for the study sample, no statistically significant correlations were found at all between frequency of visits and any aspect of ethical evaluation. In other words, repeat visits do not contribute to level of agreement of a visitor with justifications for the existence of animal-based attractions, a belief in driving forces for animal-based attractions, or conditions for ethical operation.

One of the possible explanations for this unanticipated finding is that people nowadays are constantly exposed to animal-based attractions, their roles, and functions through a variety of information sources, in addition to visiting them. The abundance of documentary films on attractions such as zoos and safaris, and media coverage of their contribution to education and conservation programs (Hughes et al., 2005; Moscardo, 2007) might influence even non-visitors or occasional visitors. Thus, even non-repeat visitors to animal-based attractions might have sufficient knowledge of their role as well as strong views and opinions on issues related to such sites. Another potential explanation is that even one visit in these sites can be sufficient for formulating an ethical evaluation—evaluation that remains relatively static with or without subsequent visits. In light of the great effort invested by animal-based attractions in presenting activities (e.g., breeding programs, community-based educational seminars) while promoting a responsible image, even a single visit can lead the visitor to formulate an ethical attitude toward these attractions.

On the other hand, statistically significant correlations -albeit relatively low- were detected between frequency of visits to animal circuses and animal theme parks with perceived importance of the roles of animal-based attractions in entertainment and education, as an alternative to nature and regulation of wildlife, and their benefits to individual animals. Note that

both types of attractions are characterized by a variety of animal shows, including choreographed performances of humans and trained animals. Such shows have been harshly criticized, in particular the techniques used to train the animals. It is argued by animal rights advocates that such techniques often involve suffering and encourage unnatural behavior (Carmeli, 2002; Cataldi, 2002; Lück & Jiang, 2007). As can be seen, frequency of visits to such sites is positively related to tourist agreement with several of the justifications for animal-based attractions.

Although it should be stressed that the above are only modest correlations that should be regarded cautiously until confirmed in other studies, the possibility exists that frequency of visits to more controversial attractions might have a relationship to agreement with the positive roles and functions of the attractions. It might be that for such attractions, several visits are needed to realize their functions in a variety of fields. In addition, these findings can be explained in terms of the theory of cognitive dissonance, posited initially by Festinger (1957): "the perception of an inconsistency among an individual's cognitions generates a negative intrapersonal state (dissonance), which motivates the individual to seek and implement a strategy to alleviate this aversive state" (Elliot & Devine, 1994, p. 382). A prominent strategy for easing cognitive dissonance is to alter one of the two "dissonant" cognitions, thus relieving discomfort (Bem, 1967).

In the context of the current findings, a tourist might enjoy visiting attractions comprising animal shows, such as animal circuses and animal theme parks; however, at the same time he/she might feel discomfort/guilt because of the nature of some of the shows. Consequently, in order to reduce the distress of cognitive dissonance—which may worsen with repeat visits—tourists' level of agreement rises with some of the justifications for the attractions. For example, a belief that the displayed animals are better off than animals in the wild can reduce the cognitive

dissonance of wild animals performing unnatural tricks. In the case of animal circuses, frequency of visits was also negatively correlated with perceived importance of natural behavior of animals, which can also be understood in terms of cognitive dissonance theory.

Another animal-based attraction with several statistically significant associations with ethical evaluation is animal racing. Frequency of visits to animal racing was weakly positively correlated with role of attractions in entertainment, and negatively with role of the attractions in conservation and in scientific research. The unique nature of this type of attraction, typically sport-related gaming rather than a focus on the animals and their characteristics/behavior, can explain the disassociation between frequency of visits with roles such as conservation and scientific research. Frequency of visits was also negatively associated with the perceived importance of each of the conditions for ethical operation of animal-based attractions. Thus, repeat visits to this type of attraction were not associated with strong sensitivity to animal welfare issues. Note that repeat visits were also negatively correlated with belief in legal system and institutional supervision as a driving force for ethical animal-based attractions. It might be the case that frequent visitors to animal racing, who are also more aware of "backstage" activity, are more skeptical about the ability of legal authorities and/or animal rights organization to significantly influence the attraction.

Finally, no significant relationships were detected between frequency of visits to bullfights and rodeos and ethical evaluation of animal-based attractions. It should be noted, however, that very few participants in the study indicated actually visiting these sites. This limitation in the sample is likely to prevent statistically significant correlations to come into view. The only exception was a negative relationship between visit rate to bullfights and perceived importance of fairness in animal-based attractions. "Fairness" refers to the "fair

chance" animals should receive in sport or contest situations, which—in light of this finding—is likely to perceived as violated in the context of bullfights.

Conclusion

In addressing research question 3 it should be noted that the relationship between frequency of visits to animal-based attractions and the ethical evaluation of such sites is relatively limited and relevant only to certain type of attractions: in the context of the current investigation, attractions with animals shows that some perceive as controversial. Attempts to explain these findings were made in light of the nature of contemporary animal-based attractions, as well as the theory of cognitive dissonance. Larger-scale investigations should be done to arrive at more definite conclusions, in addition to exploring the relationship between visits to bullfights and rodeos and ethical evaluation of attractions.

Research Question 4

What are the prominent aspects of ethical evaluation of animal-based attractions?

The theoretical framework of the current study includes assessing tourists' ethical evaluation of animal-based attraction through three distinct constructs: (1) extent of agreement with general arguments in favor of the existence of animal-based attractions; (2) perceived importance of the conditions that need to be fulfilled before an animal-based attraction can be considered ethical; and (3) extent of belief in power of driving forces to influence animal-based attractions to treat exhibited animals in an ethically responsible way. Research question 4 refers to the relative importance of various aspects of the previously mentioned three constructs.

Although it was hypothesized that people regard entertainment and recreation as the most important justifications for animal-based attractions, analysis of data reveals only partial confirmation of this supposition, which was based on previous studies suggesting that these roles are still seen as most important for animal-based attractions (Bostock, 1993; Turley, 1998; Ryan & Saward, 2004). Family-oriented experience was indeed 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, 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 previous studies (Benkenstein et al., 2003; 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).

Indeed, the rebranding of animal-based attractions is best reflected in the great importance placed on conservation as a positive argument for animal-based attractions. The impressive success of such sites in various conservation and preservation programs in the past few decades (Hutchins, 2003; Snyder et al, 1996), which has received substantial media coverage, has undoubtedly contributed to the their positioning first and foremost as conservation institutes. This radical change in the perceived nature of animal-based attractions has led many advocates to refer to them—in a time of global ecological crises—as contemporary "Noah's arks" (e.g., Hutchins & Conway, 1995; Hutchins, Smith, & Allard, 2003).

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; Turley, 1999), and educational initiatives are an attempt to educate visitors on environmental issues or a response to visitors' requests for more information on animals and their natural habitats. As a result, many attractions established ecological exhibits (that may or may not include actual animals) that emphasize environmental and conservation messages and encourage activism by visitors (e.g., putting pressure on state legislators to pass bills related to ecology) as well as satisfy visitors' curiosity about physical, biological, and behavioral characteristics of animals.

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 participants. In addition

to the role of entertainment, discussed above, scientific research was found to less important, especially compared with issues such as conservation and education. This finding is similar to the results of Davey's (2007b) study, where even though zoo visitors recognized the value of the site's research efforts, they still perceived that function as secondary to conservation and education. Although the actual research contribution of animal-based attractions is not unanimously accepted by scholars (see Jamieson, 2006), wide evidence exists of the substantial volume of valuable scientific studies conducted in attractions (e.g., Stoinski et al., 1998; Kleiman, 1992). Nevertheless, it appears that many tourists are not fully aware of these 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 a site showed that it positively contributed to an understanding of wildlife's characteristics and needs, and thus allowed for development of better conservation and environmental plans (Hutchins et al., 1995). Scientific studies conducted in animal-based attractions have also led to substantial improvement in veterinary care for both wildlife and domestic animals (e.g., Sayre, 2007).

The justifications with the least perceived importance among the study's participants were the arguments that animals in attractions are better off than animals in the wild, and that animal-based attractions represent another means to regulate and supervise wildlife. Despite certain arguments touting the favorable conditions of captive animals compared with those of animals in the wild (mostly on the grounds of freedom from predators and food concerns) (e.g.,

Bostock, 1993; Martel, 2001), in the current study these arguments were not found to be prominent justification for the existence of animal-based attractions.

The next construct in the ethical evaluation of animal-based attractions includes the conditions for their ethical operation. Since numerous indicators point to the considerable importance of natural representation of animals and the perception of natural behavior (e.g., Rhoads & Glodsworthy, 1979; Hughes et al., 2005; Thomas et al., 2002), it was hypothesized that participants assign the greatest importance to these factors among the conditions included in this construct. 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). 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 (see Randall & Fernandes, 1991).

Contrary to the hypothesis, 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. As noted by Shani and Pizam (2008), followers of the animal welfare approach "accept most tourist activities that involve the use of animals, as long it is done in a 'humane' way with maximum consideration to the animals' wellbeing" (p. 685). Indeed, the aforementioned conditions refer specifically to the alleviation of pain and suffering of animals in attractions. Even though animal-based attractions enjoy considerable popularity, tourists still seem aware of the possibility that

the animals might be abused or not receiving adequate care (Hughes, 2001). 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.

As expected, the conditions of natural environment and natural behavior of animals (see also Curtin, 2006; 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 (Markowitz, 1982; Mellen & MacPhee, 2001).

These conditions were followed in perceived importance by the aspects of safety (ensuring the security of both the audience and staff/performers) and origin of the animals

(preference for rescued animals over captured animals as part of the attraction experience). The last condition, the concept of fairness, was given the lowest importance score, presumably because it refers specifically to sport or contest situations, which do not apply to most contemporary animal-based attractions but rather to a distinct type of site such as rodeos and bullfights.

Finally, the last construct in ethical evaluation deals with the driving forces for ethical operation of animal-based attractions, and includes two aspects: (1) public opinion, which refers to the extent of belief that concerns raised by negative publicity have led animal-based attractions to treat animals more ethically and (2) legal system and institutional supervision, which refers to the extent of belief that governmental control and animal rights organizations have led to improvements in animal welfare at the attractions. 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.

Conclusion

In addressing research question 4 it should be noted that some useful—and in some cases unexpected—indicators were detected in regard to 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. The attractions should also note that the behavior of visitors themselves is an important aspect of tourists' ethical evaluation, in addition to well-recognized factors of natural environment and natural behavior of animals. The results discussed in this section have important implications for animal-based attractions, as will be detailed later in the chapter.

Research Question 5

What factors contribute to tourists' attitudes toward animal-based tourist attractions, and what is their relative importance?

The study's results reveal that participants' ethical attitudes toward animal-based attractions vary significantly across attraction types. As previously noted, only a few attempts have been made to formulate typologies of animal-based attractions and/or animal exhibits (e.g., Orams, 1996, 2002). The sites chosen for the current investigation represent the spectrum of animal-based attractions suggested by Shackley (1996), with the sites differentiated by "mobility restriction" and motivation for operation (conservation/education vs. entertainment). Indeed, 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) 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 (e.g., Conway, 2003; Jamieson, 2006; Reade & Waran, 1996). These findings support one of the basic assumptions of the model proposed by Shani and Pizam (forthcoming) 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.

The other three attraction types (animal racing, bullfighting, and rodeos), on the other hand, were significantly correlated with only a few justifications. The justification that had the strongest association with attitudes toward these sites was the role of attractions in entertainment, while in regard to the other justifications, no correlations—or only weak ones—were found. These findings indicate that justifications for animal-based attractions, excluding entertainment, are not perceived as relevant for these attractions, and the level of agreement with these justifications has no effect, positive or negative, on attitudes toward such sites.

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, forthcoming), 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., Hughes et al., 2005; 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.

A further confirmation of the central role of justifications for animal-based attractions in tourists' attitudes toward such sites can be seen in the results of the stepwise multiple regression analyses. As noted in the previous chapter, the tourists' attitudes toward each site were regressed on the dimensions of the three constructs of the ethical evaluation of animal-based attractions in order to assess the significant factors that predict tourists' attitudes. As expected in light of the correlations, the most dominant predictors of attitudes toward each of the sites were one or more of the justifications. In some cases, some specific conditions for ethical operation of animal-based attractions were also found to be statistically significant predictors of attitudes, but to a

lesser extent than the justifications. None of the driving forces for animal-based attractions were detected in regression analyses to be significant predictors of attitudes toward the attractions.

Regression analyses provide further evidence of the heterogeneity of attraction types investigated in the current study, as different predictors of attitudes toward different sites were detected. Nevertheless, it should be noted that the perceived role of attractions in entertainment was a significant predictor of attitudes toward animal theme parks, animal circuses, animal racing, bullfighting, and rodeos. Interestingly, despite the efforts of many animal theme parks (e.g., Disney's Animal Kingdom and Anheuser Busch's Sea World) to provide "exhibit naturalism" and miniaturized ecosystems that imitate the natural habitats of exhibited wildlife (Beardsworth & Bryman, 2001; Ryan & Saward, 2004), the importance of the condition of natural environment was found to have a negative effect on attitudes toward animal theme parks. This effect might be due to the circuslike shows that characterize these sites (Shani & Pizam, 2008), which might seen as antithetical to the animals' natural habitats. Yet the vast investments by many animal-based attractions in conservation and preservation programs (e.g., breeding programs and reintroduction of wildlife to nature) (Lück & Jiang, 2007; Moscardo, 2007) seem to bear fruit, as the perceived role of the attractions in conservation was found to have a positive effect on the attitude toward animal theme parks.

As in the case of animal theme parks, the perceived importance of some justifications for animal-based attractions and the conditions for ethical operation were found to negatively predict attitudes toward animal racing, bullfighting, and rodeos. The perceived role of attractions in education has a negative effect on attitudes toward animal racing and bullfighting, presumably because these sites are interpreted as antithetical to educational centers. In addition, the perceived importance of the origin of exhibited animals (i.e., preference for recued over captured

animals) had a negative influence on attitudes toward animal racing and animal circuses, the perceived importance of fairness had a negative impact on attitudes toward bullfighting, and, finally, perceived benefits of animal-based attractions for individual animals negatively affected attitudes toward rodeos. These findings provide some useful indications for animal rights/welfare organizations within and outside the attraction industry that wish to change the nature of animal use for entertainment.

On the other hand, as the perceived role of attractions in education increases, attitudes toward zoos improve, indicating that the vast educational programs of many zoos in the past (Andersen, 2003; Jiang et al., 2007; Tunnicliffe, 1995) have substantially contributed to their ethical image. Agreement with the argument that animals in captivity are better off than animals in the wild also positively affected attitudes toward zoos, a finding that can be attributed to considerable modern improvements in animal welfare practices in zoos (Coe & Lee, 1996; Tribe, 2004), which have greatly assisted in humanizing the image of zoos. Although the literature often refers to zoos and aquariums as a single type of animal-based attraction (e.g., Cain & Meritt, 2007; Frost & Roehl, 2007), it was found in the current study that other factors in the ethical evaluation of attractions predict attitudes toward aquariums: their role as family-oriented experience and as an alternative to nature. More research is required for better understanding of the perceived distinct nature of these attractions types as it appears that their diverse natures should be recognized. Finally, in regard to safari and wildlife parks, only the role of attractions in conservation was found to be a significant predictor of attitudes toward such sites. Environmental issues have received much attention in the tourism literature in recent years (Lew, 1998; Uriely et al., 2007; Wight, 1993), and the contribution of these sites to conservation and preservation seems to have a crucial function in tourists' attitudes toward them.

Conclusion

In addressing research question 5 it was found that justifications for animal-based attractions have the strongest associations with tourists' attitudes toward such sites. Thus, the key to developing positive attitudes toward attractions is the conviction in general arguments in favor of their presence. As noted, these arguments did not point toward a specific attraction, but rather served as an ideological basis for justifying the use of animals in entertainment ventures in general. On the other hand, lesser association were found between specific conditions fulfilling ethical considerations and tourists' attitudes. It was suggested that these sites' attributes might be important for people visiting individual sites, but their influence is more limited on overall attitudes toward animal-based attractions. Additionally, belief in positive effects of public opinion on attractions' ethical treatment of animals was found to have a greater association with tourists' attitudes, in comparison with more formal supervision and regulations. It can also be concluded that the study's findings confirm the heterogeneous nature of animal-based attractions as perceived by tourists, where diverse dominant factors influence attitudes toward diverse attraction types.

Research Question 6

What is the association between visitors' attitudes toward animal-based attractions and the likelihood of visiting such attractions in the future?

The study's results revealed that participants' likelihood of visiting various animal-based attractions in the future was very consistent with their attitudes toward such sites. The most ethically acceptable attractions in the eyes of tourists—safari parks, zoos, aquariums, and animal theme parks—were also the sites that received the highest scores for likelihood of future

visitation. Nevertheless, in this case the sites were ranked slightly differently; on average, participants indicated they would most likely visit aquariums, followed by zoos, safari parks, and animal theme parks. The probability of future visits to animal-based attractions, therefore, is not just a simple function of attitudes toward them, an argument also suggested in the field of social psychology (Ajzen, 2001). The four least likely sites to visit in the future—animal circuses, animal racing, rodeos, and bullfighting—were also the least morally acceptable attractions, yet again with a slightly different ranking.

To explore the relationship between attitudes toward sites and the likelihood of visiting them in the future, the two variables were compared in correlation analysis. Although a statistically significant correlation was found between attitudes and likelihood of visiting, as assumed by the theory of planned behavior (Ajzen, 2002, 2005), the degree of correlations differed significantly between the attractions. While correlations in the cases of zoos, aquariums, safari parks, and animal theme parks can be interpreted as low to moderate, correlations in the cases of animal circuses, animal racing, bullfighting, and rodeos can be interpreted as moderate to high (see the *r* interpretation guidelines of Hinkle, Wiersma & Jurs, 2003). In other words, attitudes and likelihood of visiting are more linked in regard to more controversial sites, which are seen as less morally acceptable.

These findings indicate that in regard to controversial sites, which have received harsh criticism (e.g., Carmeli, 2002; Jordan, 2005), there might be a need for a strong conviction that they are ethically acceptable before people will express a likelihood of visiting them in the future. It is possible that since visiting these attractions results in negative social pressure and sanctions, visitors to these sites—or those who wish to visit such sites—have developed exceptionally favorable attitudes toward them in order to cope with reactions of others, who

often perceive these sites as ethically unacceptable. The aforementioned theory of cognitive dissonance (Bem, 1967; Elliot & Devine, 1994), can also potentially explain these findings, as frequent visitors of controversial animal-based attractions might relieve any discomfort about visiting unpopular and disapproved sites by adopting particularly positive attitudes toward them. Visiting more socially and ethically acceptable sites, alternatively, does not seem to require such personal ethical conviction in attitudes toward them, when general approval appears sufficient.

Conclusion

In addressing research question 6, a general association was found between attitudes toward animal-based attractions and the likelihood of visiting them in the future. Nevertheless, this association was stronger with regard to less ethically acceptable sites, specifically animal circuses, animal racing, bullfighting, and rodeos. A significant relationship, yet relatively moderate, was found with more ethically acceptable sites. Potential explanations for the disparity between attraction types were provided, yet further studies are required to thoroughly understand the decision making process involved in visiting different animal-based attractions, including the impact of attitudes and other relevant factors (e.g., social norms, perceived and actual behavioral control) on intent to visit.

Contribution of the Research to the Tourism Literature

The current study aimed to fill gaps in the tourism literature by concentrating on a few elements that have received relatively little attention so far. First, a focus on animal-based attractions can contribute to development of this important but understudied subject in the tourism literature, while emphasizing the great relevance of animal-based attractions to the

tourism industry. Second, in contrast to most previous work focusing mostly on zoos, the current research took into account a wide variety of animal-based attractions. Recognition of the heterogeneity of animal-based attractions is demonstrated to be of significant value in understanding tourists' attitudes toward such sites. Third, the study considers general attitudes to animal-based attractions, as opposed to the prevalent tendency toward case studies, potentially increasing the generalizability of the results and contributing to theoretical developments in the study field of animal-based attractions.

Next, while the vast majority of studies on animal ethics in entertainment have revolved around theoretical discussions and/or "best practice" studies, the central objective of the present attempt was to empirically explore tourists' attitudes toward animal-based attractions. While it is recognized that the views of tourists cannot and should not be the sole or even main consideration in discussion of animal ethics in entertainment, their attitudes nevertheless should at least be investigated and taken into account to some degree. Such information can be used by both animal-based attractions and animal rights organizations to convey their messages more effectively. That being said, it is acknowledged that tourists' views should be considered when formulating policies, but they do not necessarily represent what is morally "right" or determine ethical actions that should be taken.

More specifically, to the best of the author's knowledge, the current study was the first to suggest and test a structured model of tourists' attitudes toward animal-based attractions, based on a preliminary qualitative study. It is hoped that these theoretical and empirical developments can assist in the design and implementation of future related studies. The results of the study provide important indicators of tourists' evaluation of and attitudes toward animal-based attractions and can serve as a basis for comparison with future research. Some of the findings

raise reservations about previous conceptions of the nature of animal-based attractions and their visitors, which can stimulate follow-up studies on these debatable issues. The research findings are also applicable to the management of animal-based attractions, as will be elaborated in the next section.

Managerial and Marketing Implications of the Research

Beyond their theoretical contribution, the findings of this study can also assist specific animal-based tourist attractions in their operational and marketing functions. Some of the implications have been mentioned in the Discussion section and are therefore discussed here only briefly. First, visiting prominent animal-based attractions (zoos, aquariums, safari parks, and animal theme parks) was found to be a popular cross-sectional leisure activity not well differentiated by socio-demographic characteristics. Although some factors such as number of children was associated with frequency of visits to a few attractions, these relationships were not as strong as one would expect. Therefore, animal-based attractions should consider appealing to wide segments of the population, which consequently may lead to an increased customer base. For example, despite the traditional role of many animal-based attractions in family-oriented experiences, which were only moderately confirmed in the present study, marketing campaigns for such attractions can broaden their focus by also targeting young singles. This is especially relevant to sites such as animal theme parks and wildlife parks (in addition to the relatively marginal attractions of rodeos, bullfights, and animal racing), which seem to be more independent from the conventional association of animal-based attractions with families and children.

Next, the preliminary qualitative study provides a model for ethical evaluation of animal-based attractions, including three constructs that contribute to the development of attitudes toward the sites, as discussed broadly in chapter 2. The current investigation quantitatively examined the relative importance for tourists of various aspects of each of the aforementioned constructs. 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. Displaying information on the animals presented, including biological and behavioral characteristics, is a vital method for enhancing the educational image of attractions. To avoid the impression of a pedagogic missionary institution, which might lead to certain resentment on the part of visitors, animal-based attractions are advised to provide visitors with entertaining ways to learn about animals and environmental issues (e.g., knowledge contests with prizes).

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."

Justifications that were found to have less importance in the eyes of the tourists, in addition to the attractions' role in entertainment, were their role in scientific research, their benefits to individual animals, and regulation of wildlife. At least in the case of scientific research, it seems to be a missed opportunity for animal-based attractions, mainly because their research efforts are closely related to their involvement in conservation programs, which was acknowledged as a vital role. Providing more information about research projects conducted at the sites can contribute to improving public awareness in this regard. This can also be done in an entertaining manner, such as letting visitors meet with personnel who engage in research, while integrating hands-on activities to demonstrate the usefulness of such research not only for conservation programs, but also for improving the quality of life of the exhibited animals.

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.

Yet, interestingly, the most important factors in this construct were found to be animal-welfare attributes that cannot be easily observed and/or judged by visitors, such as treatment of animals backstage by zoo keepers, and the training methods used with the animals. To ease these concerns and improve ethical evaluations of the attractions, it seems that management teams should follow the principle that "justice must not only be done, but also be seen as done." Providing effective signs and labels at animal exhibits and shows, as well as making keepers available to answer questions and provide explanations about the conditions in which the animals are kept and trained is likely to contribute to reducing visitors' ethical concerns about training methods and animal welfare.

Somewhat unexpectedly, visitor behavior itself was regarded by participants as an important condition for ethical operation. Consequently, the evidence that disrespectful visitor behavior toward the animals in the attractions can contribute to negative evaluation of such sites should also be taken into considerations by managerial teams. In this regard, placing staff and supervisors at the animal displays might have a positive effect on visitor behavior. Other tools

might include the establishment of a code of behavior for visitors and emphasizing their contribution to the welfare of the animals.

Despite these important recommendations for animal-based attractions, examination of the association between various aspects of ethical evaluation of animal-based attractions and attitudes toward such sites revealed that the latter have a stronger link with general justifications for the existence of animal-based attractions, rather than specific sites' attitudes and conditions. Consequently, in addition to ensuring conditions for perceived ethical operation, animal-based attractions should take into consideration that the key to developing positive attitudes among tourists depends in great deal on overall tourists' conviction of the attractions' right to exist in the first place. These findings point to the need for attractions, despite their obvious state of competition, to recognize their mutual interests and collaborate in emphasizing to the general public the roles they play that contribute to favorable ethical evaluation. These publicity and promotional efforts can be done through umbrella organizations that unite individual attractions and promote their shared interests (e.g., Association of Zoos and Aquariums). In order to reinforce the justifications for these sites, each site can be responsible for improving its specific ethical conditions.

The study also revealed that belief in public opinion as a driving force for ethical operation of animal-based attractions is more strongly associated with tourists' attitudes toward the sites than belief in the legal system and institutional supervision. Since media play a vital role in affecting public opinion, establishing relationships with journalists and media networks for the purpose of generating positive publicity is likely to prove beneficial for enhancing the image of attractions as responsible operations. Although institutional supervision was found to have a weaker association with tourists' attitudes, cooperating with animal rights organizations, which

are perceived as providing some type of informal regulation of the attractions, can also aid in establishing an ethical image of the sites.

In addition to specific implications derived directly from the study's findings, a review of both animal ethics and tourism literature raises general issues about animal-based attractions. Even if one disagrees with the positions taken by animal rights' and welfare advocates regarding the use of animals for tourism and entertainment purposes, these groups have raised troubling issues that animal-based attractions need to address. Despite the fact that animal rights movements, the majority of which are nonviolent, are sometimes perceived as representing extreme positions, their struggle is bearing fruit and influencing public opinion, legislation, and consequently the tourism industry paying attention to animal welfare issues has the potential to prevent criticism, improve the attractions' image, and ultimately contribute to profitability of the business. It is suggested here that in addition to following the recommendations proposed in this paper, both tourism practitioners and academic researchers devise additional innovative approaches for combining entertainment, education, and welfare concerns in animal-based attractions.

Although following the recommendations suggested here is expected to significantly reduce the level of criticism, the debate on the necessity of operating animal-based attractions is likely to continue, as many animal rights' advocates oppose *any* use of animals, even if they are treated humanely and ethically. However, since it seems unlikely that animal-based attractions will disappear in the near future, animal rights' organizations might be wise to abandon an "all or nothing" policy and cooperate with the attractions in order to improve animal welfare, as much as possible. In any case, the ethical concerns raised in this study are expected to remain at the center of the debate on the role and nature of animal-based attractions.

Limitations of the Study

The current study has limitations, as reviewed in chapter 1, which will be mentioned briefly here. 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 tourist destination that includes major well-known animal attractions such as Sea World, Busch Gardens, Animal Kingdom, Gatorland, and numerous dinner shows featuring animals. 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.

Because this was an exploratory study, more research is needed to validate its results. Investigation focusing on various populations, using more representative sampling techniques, can be especially useful for comparison analyses and generalizing the findings of this study.

Suggestions for Future Research

Many academic disciplines that study the use of animals, including social sciences and the humanities, recognize the need to address ethical issues relating to both education and research. However, in spite of the large-scale use of animals in the tourism industry, hospitality and tourism education has practically ignored this issue, both in its curricula and in its research and scientific publications. The animal rights issue raises concerns that are highly relevant to the

ethical development of the tourism industry, especially the question of whether it is justifiable to keep animals in captivity for the entertainment and education of visitors.

The study reveals gaps in the literature that need to be bridged in future research. Future studies, in both general and tourism literature, should include, among other goals, attempts to answer the following questions:

- What is the actual educational value of animal-based attractions to visitors in general and to children in particular?
- Have animal-based attractions fulfilled the promise of promoting ecological awareness and encouraging participation in environmental activism?
- Have modern trends and changes in the nature of animal-based attractions (e.g., transformation to natural representations of the exhibited animals) improved the welfare of the animals, or is has it been merely a matter of creating a visual illusion aimed at relieving the guilt of visitors?
- Can collaborations between animal rights organizations and animal-based attractions be achieved and, if so, on what shared principles should they be based?
- What are the essential actions that managers of animal-based attractions can take to ensure the welfare of the animals exhibited?
- What are the effects of encounters with wildlife in tourist attractions on human-animal relations in other surroundings (e.g., hunting and fishing)?
- What are the effects of popular trends and emerging lifestyles (e.g., vegetarianism and environmentalism) on people's views of animal-based attractions?

Tourism researchers and practitioners are encouraged to empirically study these issues in depth in order to bring about a greater and more accurate understanding of the ethical concerns involved in visiting animal-based attractions.

Summary

The chapter provided a broad review of the study and discussion of its findings, including cross-validations with previous studies, conclusions, implications for practitioners, and recommendations for future research. The study is among the first to investigate animal-based attractions in captive settings in the tourism literature, and can serve as a framework for additional studies. For the most part, the perceptions of tourists (and of the public at large) about using animals for amusement and entertainment has been ambiguous and speculative. Overall, the study can be seen as an additional step toward a deeper understanding of ethical perceptions and judgments of animal-based tourist attractions on the part of visitors. It is hoped that the discussion and the empirical evidence provided here is of considerable value for tourism and leisure businesses, as well as for further development of the discipline of animal use in tourism.

APPENDIX A: INFORMED LETTER OF CONSENT FORM

Consent Form – Animal Attractions' Questionnaire

We are researchers in the Rosen College of Hospitality Management at the University of Central Florida, Orlando, FL. I would like to invite you to participate in a research project about people's attitudes toward the use of animals in tourism and entertainment. We are interested in exploring opinions and ideas of travelers in regard to the incorporation of animals in tourist attractions.

This research will involve your participation in a survey, which takes approximately 10 minutes to complete. You must be 18 years or older to participate in the study.

You are being invited to take part in this research because we feel that you can contribute much to our understanding of what travelers like you think about tourist attractions that involve animals in their operations.

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. You do not have to answer any question that you do not wish to answer.

There is no risk in participating in the study. The participants in the project will remain anonymous and will not be identified by their names.

There are no direct benefits for you and you will not be provided any incentive to take part in the research. However, we will give you a Rosen College pen as a token of gratitude for your cooperation.

We will happy to share with you the knowledge that we get from this research. Upon request, each participant will receive a summary of the results.

If you have any questions, you can ask them now or later. If you wish to ask questions later, or to request a copy of the study results, you may contact any of the following:

Principal Investigator:
Amir Shani
Rosen College of Hospitality Management
University of Central Florida
Tel: 407-903-8080
Email: ashani@mail.ucf.edu

Faculty Supervisor:
Dr. Abraham Pizam, Dean
Rosen College of Hospitality Management
University of Central Florida
Tel. 407-903-8010
Email: apizam@mail.ucf.edu

Please note: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board. Questions or concerns about research participants' rights may be directed to the UCF IRB office, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246, or by campus mail 32816-0150. The hours of operation are 8:00 am until 5:00 pm, Monday through Friday except on University of Central Florida official holidays. The telephone numbers are (407) 882-2276 and (407) 823-2901.

APPENDIX B: SURVEY INSTRUMENT

Animal Attractions' Questionnaire

We are asking for your cooperation in completing this questionnaire developed to study tourists' perceptions of animal-based attractions. Please be assured the questionnaire is anonymous. We are not interested in identifying individual participants and do not ask you to provide your name. The data from the study will be used only in an aggregated form.

1. Approximately how many times have you visited each of the following sites in the past five years (Please mark X)?

	None	1-2 Times	3-4 Times	5-6 Times	7 Times or More
1. Zoo	□	□	□	□	□
2. Aquarium	□	□	□	□	□
3. Animal Circus	□	□	□	□	□
4. Safari or Wildlife Park	□	□	□	□	□
5. Animal Theme Park	□	□	□	□	□
6. Animal Racing	□	□	□	□	□
7. Bullfighting	□	□	□	□	□
8. Rodeo	□	□	□	□	□

2. How important do you consider the following when visiting animal-based attractions (Please mark X)?

	Very unimportant	Unimportant	Neither important nor unimportant	Important	Very important
1. That animals are not abused during training	□	□	□	□	□
2. That the animals express natural behavior	□	□	□	□	□
3. That the animal enclosures contain stimulating materials	□	□	□	□	□
4. That animal enclosures replicate natural habitats	□	□	□	□	□
5. That animals are kept in their natural environment/habitat	□	□	□	□	□
6. That the animal enclosures are of a 'good size'	□	□	□	□	□
7. That the animals have private places away from visitors	□	□	□	□	□
8. That animals are trained gently	□	□	□	□	□
9. That animals are 'doing natural things'	□	□	□	□	□
10. That the animals receive a 'fair chance' in sport or contest situations	□	□	□	□	□
11. That the animal shows and exhibits do not constitute any risk for the audience	□	□	□	□	□
12. That the animal shows and exhibits do not constitute any risk for staff/performers	□	□	□	□	□
13. That the visitors to the attraction display respectful behavior towards the animals	□	□	□	□	□
14. That there is supervision of the visitors' behavior towards the animals	□	□	□	□	□
15. That the exhibited animals receive sufficient food and medical care	□	□	□	□	□
16. That the zoo keepers are educated and sensitive to the animals	□	□	□	□	□
17. That the attraction displays rescued wildlife, rather than animals that were simply captured in the wild	□	□	□	□	□

3. Please indicate your level of agreement or disagreement with each statement below (Please mark X):

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1.Animal attractions are places where visitors can see animals entertaining them	□	□	□	□	□
2.Animal attractions are important places for adults to share something with children	□	□	□	□	□
3.Animal attractions play an important recreational role for families	□	□	□	□	□
4.Animal attractions are important places for conserving wildlife	□	□	□	□	□
5.Animal attractions play an important role in preserving endangered species	□	□	□	□	□
6.We must support animal attractions so they can develop breeding programs	□	□	□	□	□
7.Animal attractions allow people to see wildlife without destroying their natural habitat	□	□	□	□	□
8.Using animals in tourist attractions is beneficial for educational purposes	□	□	□	□	□
9.Animal attractions promote environmental awareness	□	□	□	□	□
10.Animal attractions play an important role in entertaining visitors	□	□	□	□	□
11.Animal attractions are important sites to learn about animals	□	□	□	□	□
12.Animal attractions are important educational sites for children	□	□	□	□	□
13.Animal attractions demonstrate how to treat animals responsibly	□	□	□	□	□
14.Animal attractions contribute to "softening" the negative image of certain animals and making them less intimidating	□	□	□	□	□
15.Animal attractions play an important role in scientific research	□	□	□	□	□
16.Conducting research in animal attractions is sometimes the only way scientists can learn about wildlife	□	□	□	□	□
17.The research conducted in animal attractions is vital in order to save endangered species from becoming extinct	□	□	□	□	□
18.Animal attractions are an affordable and inexpensive alternative to seeing wildlife in their natural habitat	□	□	□	□	□
19.Animal attractions are a safe and secure alternative to seeing wildlife in their natural habitat	□	□	□	□	□
20.Without animal attractions many people would not have the opportunity to see wildlife	□	□	□	□	□
21.Animals in attractions are better off than animals in the wild, since they are free from predators	□	□	□	□	□
22.Animals in attractions are better off than animals in the wild, since they have no food concerns	□	□	□	□	□
23.Animal attractions provide a safe and secure environment for wildlife	□	□	□	□	□
24.Keeping animals in attractions is an important way to regulate and supervise the natural environment and the wildlife	□	□	□	□	□

4. Please indicate your level of agreement or disagreement with each statement below (Please mark X):

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Animal attractions have an interest in being more sensitive in their treatment of animals because it is good for business	□	□	□	□	□
2. The concern of negative public relations has made animal attractions more sensitive in their treatment of animals	□	□	□	□	□
3. Today there is much more governmental control of the way animals are treated in attractions	□	□	□	□	□
4. Today there are more regulations to ensure the welfare of animals in attractions	□	□	□	□	□
5. Increasing public awareness to animal welfare has made animal attractions more sensitive in their treatment of animals	□	□	□	□	□
6. Animal rights organizations have led to improvements in the welfare of animals in attractions	□	□	□	□	□

5. Please indicate for the sites listed below, the extent to which you find it morally acceptable or unacceptable (Please mark X):

	Totally unacceptable	Unacceptable	Neither acceptable nor unacceptable	Acceptable	Totally acceptable
1. Zoo	□	□	□	□	□
2. Aquarium	□	□	□	□	□
3. Animal Circus	□	□	□	□	□
4. Safari or Wildlife Park	□	□	□	□	□
5. Animal Theme Park	□	□	□	□	□
6. Animal Racing	□	□	□	□	□
7. Bullfighting	□	□	□	□	□
8. Rodeo	□	□	□	□	□

6. How likely are you to visit the following sites in the future (Please mark X)?

	Very Unlikely	Not likely	Neither likely nor unlikely	Likely	Very likely
1. Zoo	□	□	□	□	□
2. Aquarium	□	□	□	□	□
3. Animal Circus	□	□	□	□	□
4. Safari or Wildlife Park	□	□	□	□	□
5. Animal Theme Park	□	□	□	□	□
6. Animal Racing	□	□	□	□	□
7. Bullfighting	□	□	□	□	□
8. Rodeo	□	□	□	□	□

PERSONAL BACKGROUND (FOR STATISTICAL PURPOSES ONLY)

1) Gender:

□ Male □ Female

2) Marital status:

□ Single □ Married □ Other

3) Age _____

4) Number of children under 18: _____

5) Number of children over 18: _____

6) Highest level of education:

□ Attended High School □ Graduated from High School

□ Attended College □ Graduated from College

□ Post Graduate College □ Other: _____

7) Occupation_____

8) Ethnicity:

□ African American □ Asian

□ Hispanic □ Caucasian/White

□ Other: _____

9) How many pets do you have? _____

10) Are you a US citizen or permanent resident? □ Yes □ No
If no, what do you consider as your country of nationality_____

11) Income level:

□ Under $25,000 □ $25,000-$29,999

□ $30,000-$39,999 □ $40,000-$49,999

□ $50,000-$74,999 □ $75,000-$99,999

□ $100,000 & Over

12) Have you ever donated money for animal welfare causes? □ Yes □ No

13) Are you a member of an animal welfare organization? □ Yes □ No

*****THANK YOU FOR COMPLETING THIS QUESTIONNAIRE*****

APPENDIX C: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Exempt Review Status

From: **UCF Institutional Review Board**
FWA00000351, Exp. 10/8/11, IRB00001138

To: **Amir Shani**

Date: **February 12, 2009**

IRB Number: **SBE-09-06072**

Study Title: **TOURISTS' ATTITUDES TOWARD THE USE OF ANIMALS IN TOURIST ATTRACTIONS: AN EMPIRICAL INVESTIGATION**

Dear Researcher:

Your research protocol was reviewed by the IRB Vice-chair on 2/12/2009. Per federal regulations, 45 CFR 46.101, your study has been determined to be **minimal risk for human subjects and exempt** from 45 CFR 46 federal regulations and further IRB review or renewal unless you later wish to add the use of identifiers or change the protocol procedures in a way that might increase risk to participants. Before making any changes to your study, call the IRB office to discuss the changes. **A change which incorporates the use of identifiers may mean the study is no longer exempt, thus requiring the submission of a new application to change the classification to expedited if the risk is still minimal.** Please submit the Termination/Final Report form when the study has been completed. All forms may be completed and submitted online at https://iris.research.ucf.edu.

The category for which exempt status has been determined for this protocol is as follows:

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures, or the observation of public behavior, so long as confidentiality is maintained.

(i) Information obtained is recorded in such a manner that the subject cannot be identified, directly or through identifiers linked to the subject, **and/or**

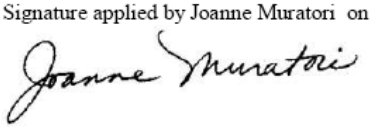
(ii) Subject's responses, if known outside the research would not reasonably place the subject at risk of criminal or civil liability or be damaging to the subject's financial standing or employability or reputation.

A **waiver of documentation of consent** has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 02/12/2009 12:28:44 PM EST



IRB Coordinator

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