



PERCEPTION OF VISITORS' ATTITUDE TOWARDS THE ENVIRONMENT AT OGBA ZOOLOGICAL GARDEN AND NATURE PARK, BENIN CITY, EDO STATE, NIGERIA

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Abstract

This study examined the perception of visitors' attitude towards the environment of Ogba zoological garden and Nature Park using questionnaires and the data collected were analysed using descriptive statistics. The results showed that 82.5% of the visitors were interested in nature conservation and 83.8% claimed that they would encourage their friends and families to conserve nature and they further affirmed that nature conservation was very important. Majority of the visitors (78.1%) were optimistic about the zoo. It was also shown that 87.5% of the visitors showed commitment to improve the welfare and living condition of the animals while 47.1% suggested that feed should be provided for the animals. It was revealed that the staff had a knowledge and experience about zoo management for the past five years. All the staff (100%) claimed that they frequently carryout maintenance of the cages on daily basis. Moreover, 60% of the staff claimed that visitors did not pose any threat to the zoo management while a substantial percentage of staff (80%) claimed that visitors' attitude contributed positively to the zoo environment. It could be concluded that majority of the visitors display positive attitudinal behaviour towards the zoo environment in creating awareness about nature conservation.

Keywords: cage maintenance, nature conversation, travel motive, welfare of animals, zoo environment.

Introduction

Zoos are *ex-situ* conservation attractions; free choice learning site for the general public, by which a range of fauna species are conserved outside their natural environment in an enclosed area. According to Hunter-Jones and Haywood (1998), a zoo is a general collection of predominantly wild animals, in an area of 110 acres or less, made accessible for human observation. Botanical gardens, aquariums and nature reserves are also *ex-situ* conservation attractions and of high importance in the fight for the conservation of our natural ecosystems and species. These institutions, as places of formal education, collaborate with conventional schools, Teachers Training Institutes, Colleges and Universities (WAZA, 2005). Estimates by the World Association of zoos and Aquariums reveal that a lot more than 600 million visitors visit about 1,200 zoos annually (Holtorf, 2008). The zoo visiting public includes groups of all ages, educational levels, and diverse social, economic, ethnic and cultural backgrounds (Coe, 1984). The existence of zoos thrives on visitors' financial contributions, hence the need to understand their motivation towards visiting a zoo (Jordan and Plessis, 2014). To attract visitors, therefore, modern zoo exhibits should be both entertaining and educational (Karamikola *et al.*, 2014). Health and Safety Executive (2012) opined that preventing harm to visitors and preserving human resources is viewed as being cost effective and vital to reducing financial losses and liabilities. Although zoos are generally committed to high standards of welfare, the safety of visitors to the zoo should also be prioritized above all (World Zoo Organization, 1999).

The sustainable development of natural and cultural heritage sites, wildlife attraction in and outside protected areas does not only depend on the measures taken by government and administrative units, but it is also based on environmental attitude and behaviours of tourist during their visits (Honey, 2008). Milfont and Duckitt (2010) described environmental attitude as a psychological disposition expressed by evaluating responses of the natural with some level of favour and disfavour. The human nature relationship is fundamental in resource

management. Schroeder, (2007) states that people's judgements about the acceptability of different kinds of human activity in natural environments often seem to stem from an underlying sense of how humans are related to non-human nature. The degree to which an individual associate himself with nature is directly related to the types of attitude he has developed over time. It is also argued that an individual's belief about nature and the human role in it are a fundamental component of a person's belief system in relation to the environment (Dunlap *et al.*, 2000).

Therefore, how a person perceives the environment may be consequential in his support for sustainable zoo management. Thorgersen and Olander (2002) tested a causal relationship between values and behaviour in terms of sustainable consumption and found out that value priorities are usually important for sustainable consumption. Similarly, it was that reported normal daily consumption such as tourist visitation, may be influenced. Two fundamental attitudinal perspectives in relation to the natural environment have been recognized as both contemporary and pervasive (Milfont and Duckitt, 2004). The anthropocentric perspective represents the idea that humans are the centre of the universe (Campbell, 1983). Anthropocentrism considers humans to be the most important life form, and other forms of life to be important only to the extent that they can be exploited (Page and Connell, 2009).

Materials and Methods

Study Area

This research was conducted at Ogba zoo and Nature Park in Edo State. It is situated between longitude 5°35'E and 45°63'E and latitude 61°17'N and 57°37'N in Oredo Local Government Area of Edo State with an average elevation of 46m above sea level. The climate is that of the rainforest zone of the southwest Nigeria. Rainfall is usually high, about 2000 mm annually with an average of 1,500mm (FORMECU, 1999). Relative humidity ranges from 75% (12 noon) and 95% (6:00 am). Average temperature is about 27°C. The place is currently managed by BENZOPA, a Non-governmental organization in partnership with the State Government, via a lease agreement primarily to promote conservation and ecotourism in Edo State.

Sampling Techniques and Data Collection

Preliminary visits were made to Ogba Zoological Garden and Nature Park. Information concerning the total number of employees and average number of visitors were obtained from the zoo records. Sampling intensities of 100% and 75% were applied to randomly selected employees and visitors respectively. Questionnaires to the visitors were distributed using the simple random sampling technique. The employees at the zoo were purposively selected as they seemed to be in the position to provide the required information. Data were collected using the questionnaire that comprised of open and close-ended questions. The questionnaire was of two types- Questionnaire A for visitors and Questionnaire B for employees – both eliciting information on environmental attitudes of visitors to the zoo. Personal interviews were also conducted with key informants at the zoo.

Data Analysis

Data collected were analysed using descriptive statistics (frequency and percentage tables; bar charts) and inferential statistics (analysis of variance at 5% level of significance). Significant means were separated using the Duncan New Multiple Range Test (1955).

Results

Table 1 presents demographic characteristics of the respondents. It was shown that 51.9% of the visitors were males while 48.1% were females. About 80% of the staff were males while 20% were females. Again 36.9% of the visitors fell within the age range of 26-30 years closely followed by the age range of 18-25 years (30%), while 60% of the staff fell within the

age range of ≥ 31 years. It was also shown that 51.3% of the visitors were single, while 60% of the staff were married. It was shown that 58.1% of the visitors and 80% of the staff were Christians. The level of education was revealed to be 53.8% and 36.2% of the visitors had secondary and tertiary education respectively while 60% and 40% of the staff had secondary and tertiary education respectively. It was also shown that 78.1% of the visitors were Nigerians while 21.9% were foreigners and all the members of staff (100%) were Nigerians.

Table 1: Demographic Characteristics of the Respondents

| Variables | Visitors | | Staff | |
|---------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Gender | | | | |
| Male | 83 | 51.9 | 8 | 80 |
| Female | 77 | 48.1 | 2 | 20 |
| Total | 160 | 100 | 10 | 100 |
| Age | | | | |
| ≤ 17 | 25 | 15.6 | 0 | 0.0 |
| 18-25 | 48 | 30.0 | 1 | 10 |
| 26-30 | 59 | 36.9 | 3 | 30 |
| ≥ 31 | 28 | 17.5 | 6 | 60 |
| Total | 160 | 100 | 10 | 100 |
| Marital status | | | | |
| Single | 82 | 51.3 | 4 | 40 |
| Married | 67 | 41.9 | 6 | 60 |
| Divorce | 05 | 3.1 | 0 | 0.0 |
| Widow | 06 | 3.7 | 0 | |
| Total | 160 | 100 | 10 | 100 |
| Religion: | | | | |
| Islam | 36 | 22.5 | 0 | 0.0 |
| Christian | 93 | 58.1 | 8 | 80 |
| Traditional | 31 | 19.4 | 2 | 20 |
| Total | 160 | 100 | 10 | 100 |
| Level of education | | | | |
| No formal education | 0.0 | 0.0 | 0 | 0.0 |
| Primary | 16 | 10.0 | 0 | 0.0 |
| Secondary | 86 | 53.8 | 6 | 60 |
| Tertiary | 58 | 36.2 | 4 | 40 |
| Total | 160 | 100 | 10 | 100 |
| Nationality | | | | |
| Nigerian | 125 | 78.1 | 10 | 100 |
| Foreigners | 35 | 21.9 | 0 | 0.0 |
| Total | 160 | 100 | 10 | 100 |

Source: Field Survey, 2022

Table 2 presents visitors' perception of Ogba zoological Garden and Nature Park. It was shown that 35% of the visitors had 3-4 years patronage for the zoo, (36.3%) visited the zoo majorly on festive periods whereas, 33.1% visited during holiday periods. Source of motivation was revealed to be nature observation 46.9%. Some of the respondents (36.3%) got information about the zoo from the mass media whereas 33.1, 18.1 and 12.5% of respondents sourced information through friends, internet and pamphlets, respectively.

Table 2: Visitors' Perception of Ogba Zoological Garden and Nature Park

| Variables | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Years of patronizing the zoo | | |
| First time | 34 | 21.2 |
| 1-2 years | 40 | 25.0 |
| 3-4 years | 56 | 35.0 |
| Over 5 years | 30 | 18.8 |
| Total | 160 | 100 |
| Frequency of patronizing the zoo | | |
| Once a week | 18 | 11.2 |
| Once a month | 31 | 19.4 |
| During holidays | 53 | 33.1 |
| Festive period | 58 | 36.3 |
| Total | 160 | 100 |
| Visitors motivators | | |
| Recreation | 41 | 25.6 |
| Research/ study | 16 | 10.0 |
| Nature observation | 75 | 46.9 |
| Relaxation | 28 | 17.5 |
| Total | 160 | 100 |
| Source of information about the zoo | | |
| Mass media | 58 | 36.3 |
| Pamphlets | 20 | 12.5 |
| Internet | 29 | 18.1 |
| Through friends | 53 | 33.1 |
| Total | 160 | 100 |

Source: Field Survey, 2022

Table 3 presents visitors perception towards wildlife conservation. It revealed that 82.5% of the visitors were interested in nature conservation, 58.7% had not attended programmes about conservation and 42.5% agreed that conservation helps to prevent endangered species from going into extinction. It was shown that 83.8% of the visitors claimed that they would encourage their friends and family to conserve nature and 75% consented that biodiversity conservation is very important to them.

Table 3: Visitors' perception towards wildlife conservation

| Variables | Frequency | Percentage |
|--|-----------|------------|
| Visitors contest | | |
| Yes | 132 | 82.5 |
| No | 28 | 17.5 |
| Total | 160 | 100 |
| Attends programs about conservation | | |
| Yes | 66 | 41.3 |
| No | 94 | 58.7 |
| Total | 160 | 100 |
| Consent to conversation helps to prevent endangered species from going into extinction | | |
| Agree | 68 | 42.5 |
| Strongly agree | 55 | 34.4 |
| Disagree | 24 | 15.0 |
| Strongly disagree | 13 | 8.1 |
| Total | 160 | 100 |
| Would you encourage your friends or family to conserve nature? | | |
| Yes | 134 | 83.8 |
| No | 26 | 16.2 |
| Total | 160 | 100 |
| Importance of biodiversity conservation to the visitors | | |
| Unimportant | 10 | 6.2 |
| Somehow important | 30 | 18.8 |
| Very important | 120 | 75.0 |
| Total | 160 | 100 |

Source: Field Survey, 2022

Table 4 presents visitors' perception of the zoo environment. It was shown that 51.9% of the visitors affirmed that the zoo environment was friendly, while 41.2% liked the environment. It was shown that 57.5% of the visitors were satisfied with the needs and expectations of the zoo management and 78.1% were optimistic about the zoo environment.

Table 4: Visitors' Perception of the Zoo Environment

| Variables | Frequency | Percentage |
|---|-----------|------------|
| How do you perceive the zoo environment | | |
| Friendly | 83 | 51.9 |
| Like | 66 | 41.2 |
| Dislike | 11 | 6.9 |
| Forbidden | | |
| Total | 160 | 100 |
| The visitors' needs and expectation of the zoo management | | |
| Yes | 92 | 57.5 |
| No | 68 | 42.5 |
| Total | 160 | 100 |
| Visitors' optimistic/pessimistic about the zoo | | |
| Optimistic | 125 | 78.1 |
| Pessimistic | 35 | 21.9 |

| | | |
|-------|-----|-----|
| Total | 160 | 100 |
|-------|-----|-----|

Source: Field Survey, 2022.

Table 5 presents visitors' suggestions on increasing the welfare of the zoo. It revealed that (87.5%) of the visitors claimed that they were committed to improving the welfare and living conditions of the animals. Some respondents (47.1%) agreed to supply feeds to the zoo management for the animals, whereas 48.1% of the visitors agreed to improve the management of the zoo through contribution to animal welfare.

Table 5: Visitors' Suggestions on Increasing the Welfare of the Zoo

| Variables | Frequency | Percentage |
|---|-----------|------------|
| Visitors commitment to improve the welfare and living condition of the animal | | |
| Yes | 140 | 87.5 |
| No | 20 | 12.5 |
| Total | 160 | 100 |
| If Yes | | |
| Feeding of the animals | 42 | 30.0 |
| Supply feed to the zoo management to feed the animals | 66 | 47.1 |
| Financial support | 20 | 14.3 |
| Donate animals | 12 | 8.6 |
| Total | 140 | 100 |
| Assistant of the visitors in improving the management of the zoo: | | |
| Donation of waste bin | 35 | 21.9 |
| Financial contribution | 23 | 14.4 |
| Contribution to animal welfare | 77 | 48.1 |
| Improving on the security of the zoo | 25 | 15.6 |
| Total | 160 | 100 |

Source: Field Survey, 2022.

Table 6 present employees' knowledge and practice of zoo management. It revealed that 50% of the zoo staff have been working with the zoo for over 2-4 years, while 30 and 20% had over 5 years and less than 2 years working experience with the zoo, respectively. All (100%) the zoo staff claimed that they educate the visitors on the need for environmental conservation and management of the zoo and 70% affirmed that the zoo management had organized environmental education programmes in the last 5 years. The results also showed that 100% of the staff frequently maintained the zoo cages on daily basis.

Table 6: Employees' knowledge and Practice of Zoo Management

| Variables | Frequency | Percentage |
|--|------------------|-------------------|
| Years of working in the zoo | | |
| ≤ 2 years | 2 | 20 |
| 2-4 years | 5 | 50 |
| More than 5 years | 3 | 30 |
| Total | 10 | 100 |
| Education of the visitors on the need for environmental conservation and management of the zoo | | |
| Yes | 10 | 100 |
| No | 0 | 0 |
| Total | 10 | 100 |
| Organization of environmental education program in the last 5 years | | |
| Yes | 7 | 70 |
| No | 3 | 30 |
| Total | 10 | 100 |
| Frequency of carrying out routine of maintenance of the zoo cages | | |
| Once in a year | 0 | 0 |
| Once in 2 years | 0 | 0 |
| Once in 3 years | 0 | 0 |
| Daily basis | 10 | 100 |
| Total | 10 | 100 |
| Commitment of the zoo staff to improve the welfare and living condition of the zoo | | |
| Yes | 10 | 100 |
| No | 0 | 0 |
| Total | 10 | 100 |

Source: Field Survey, 2022.

Table 7 presents Employees Notion about the Visitors. It revealed that 60% of the staff strongly disagreed that the visitor's attitudes posed threats to the management of the zoo, whereas 80% affirmed that the visitor's attitudes contribute positively to the zoo environment.

Table 7: Employees' Notion about the Visitors

| Variables | Frequency | Percentage |
|--|------------------|-------------------|
| Zoo visitors' attitudes posing threats to the management | | |
| Strongly agree | 0 | 0 |
| Agree | 2 | 20 |
| Disagree | 2 | 20 |
| Strongly disagree | 6 | 60 |
| Total | 10 | 100 |
| Visitors' attitudes contributing positively to the environment | | |
| Yes | 8 | 80 |
| No | 2 | 20 |
| Total | 10 | 100 |

Source: Field Survey, 2022.

Discussion

The results of this study revealed that majority of the visitors interviewed had positive environmental attitude towards the zoo management. It was observed that majorities were males, single with high level of secondary and tertiary education and this could be attributed to the awareness creation across most of the educational centres about the zoo and their conservation activities which might have fostered educational tour to the zoo. This is in agreement with the observation of Ajzen and Fishbein, (1980) that majority of visitors interviewed who attained formal education appreciated values of ecotourism potentials and its environmental progress. The study further revealed that the variation in respondents' level of visitation, festive and holiday period, were highly significant and well distributed among visitors. Large populations (46.9%) of the visitors also visit the zoo for nature observation as the major drive of motivation. In this study, mass media, friends, internets and pamphlets played vital roles in visitor's sources of information about the zoo. The mass media was highly significant as the major source of information among majority of the respondents indicating that mass media played a vital role in creating and disseminating information about the zoo to the public. This source of information has been identified as one of the most effective ways of receiving information across to the largest possible audience in any country (Komali, 2011).

With regards to visitor's perception about the zoo environment there were positive attitudinal attribute of environmental friendliness and likeness on the side of the visitors interviewed. Majority of the visitors stated that their needs expectations of the zoo were met, although they stated that some of the zoo staff were not people friendly. The visitors held positive optimisms of the zoo development and welfare of the animals. Vast majority of the visitors visit the zoo for aesthetic values of the animals, social interaction with visitors and nature observation of the zoo. This implies that the major purpose of the respondents visiting the zoo is mainly for recreation and the attractive nature of the zoo, these findings agreed with Ogunjumi *et al.*, (2017) who stated that conservation and education were seemingly not the primary motives for zoo visitation. Rating of the zoo was highly significant (87.5%) among respondents interviewed. The visitors (87.5%) advocated for an increasing level of animal welfare.

Furthermore, it was observed that there was an increased level of voluntarism to donate waste bin and contribute to the welfare of the animals. Working experience was observed to be well distributed among the staff of the zoo though, it was discovered that majority of the zoo staff affirmed that management organize programmes on conservation and environmental education for visitors from time to time. It was revealed that zoo staff were apparently involved in the maintenance and welfare of the animals on daily basis, and the visitors as well as the zoo management, seemingly have positive relationship during visitation. This may improve the management and welfare of the animals.

Conclusion

It was shown that the visitors to Ogba Zoological Garden and Nature Park apparently have positive environmental attitude towards conservation. It was revealed that most of the respondents visited the zoo for recreational activities and the main source of information was through the mass media, which was not different from the major conventional means of disseminating information through advocacy and sensitization about natural resources conservation. Majority of the visitors displayed positive attitudinal behaviour towards the zoo environment by creating awareness and encouraging the conservation of nature resources.

Consequently, the management of Ogba Zoological Garden and Nature Park should ensure that the positive attitudinal characteristics of the visitors towards the zoo should extend not only to the zoo but to other conservation strategies. Essentially, the management of the zoo should improve on the various sources of information on the need for environmental conservation and natural resources. More significantly, there is a need for an in-depth

sensitization and advocacy on the visitors to improve more on the positive attitude of the visitors towards the environment.

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