Animal Welfare Perspectives Against the Backdrop of Animal Cruelty in Nigeria

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ABSTRACT

Knowledge is crucial for improving animal welfare. People's perceptions, attitudes, and understanding may be a hindrance to adopting animal welfare-improving ideas which is crucial for developing effective animal welfare policies and advocacy in Nigeria. This study evaluates the current knowledge, attitudes, and perceptions of animal welfare among Nigerian residents. A cross-sectional survey using a structured questionnaire distributed via emails, social media platforms, and by personal contact. The survey collected data from 694 respondents across the 36 states and the Federal Capital Territory of Nigeria over 6 months (November 2023 and June 2024). Descriptive statistics, reliability testing, and inferential statistical tests were performed using SPSS for windows. The result revealed that majority (60-87.3%) of the respondents had a good knowledge of what constitutes cruelty to animals. Also, 88.8% were aware that animals have right to freedoms that could enhance their welfare, and 96.1% agreed that freedom from hunger and thirst is reasonable for animals. The standard deviations were relatively low, suggesting consistent responses among participants. Respondents (87.3%) also supported the enforcement of animal cruelty laws and the enactment of comprehensive animal welfare laws in Nigeria. The high knowledge scores among Nigerian residents suggest a strong foundational understanding of animal welfare principles. It is recommended that despite the result continual advocacy and policy development are still necessary to shape the public attitudes, and perceptions to animal.

Keywords: Attitudes, Cruelty, Nigeria, Perception, Stunning, Welfare

INTRODUCTION

Animals have been human property used to satisfy ma need of food, transportation, power, clothing. Animals have also been a source of wealth and tools for research, religion, entertainment and ceremonial purposes. (Cupp Jr, 2016). Thus, all of the ancient legal systems classified animals as a form of property, and often were quite detailed and specific regarding remedies for damage to or destruction of an animal as property (Alabi *et al.,* 2020; Safitri *et al.,* 2022). Animal welfare which is the major concept of animal right is a complex and multifaceted issue involving social, cultural, scientific, political, economic, religious and ethical dimensions (Shoyombo *et al.,* 2019). Over the past 15 years, animal protection legislation has been a global trend and the notion of animal welfare has proceeded beyond the concept of prevention of acts of cruelty (Njisane *et al.,* 2021). Welfare is an emotional state of ease produced by a combination of pleasant feelings for the animal. It requires that an animal be in good health and security. Also, that its physiological and environmental needs are adequately provided e for them to express their normal behaviour according to their biological rhythms (Adenkola and Ayo, 2010). These needs are specific to each individual's species, gender and age. They can also vary depending on the time of the day or year (Hild and Schweitzer, 2019). Meanwhile, there is little or no concern on subjects of applied ethology in developing countries of the world such as Africa and Asia, and particularly in countries like Nigeria, where livestock production and wildlife conservation is currently experiencing nascent growth. Issues of animal welfare are currently being promoted by research, sponsored information, legislation, and enforcement by relevant agencies in developed nations of the world. Factors such as poor economic and technological advancements, political instabilities, social insecurities, low level of awareness, and lack of information on legal provisions on animal-welfare have been identified to be responsible for poor animal welfare and its science in developing countries. Though farm animals are mostly victims of the lack of welfare practices, domestic animals and those in the wild are still below standard where welfare is a concern. Whilst countries in the developed world have strict legislations in place to protect the welfare of food animals during slaughter via the European Council Regulation, EC1099/2009, and the Humane Slaughter Act 1958 (Fuseini and Suleymana, 2018). Abattoir operations in many developing countries like Nigeria are more concern about maximizing profits with little or no regard for the welfare of animals, product quality, or safety (Annan-Prah *et al.,* 2012). The lack of adequate animal welfare policy in Nigeria can also be blamed on poor record keeping and deterrents on animal welfare compromises during transport and at slaughter. Moreover, many animal slaughter operations in Nigerian abattoirs are mostly carried out by religion adherent who argue that pre-slaughter stunning is contrary to the rules of Halal slaughter (Frimpong *et al.,* 2012). This is the opinion of religious adherent that pre-slaughter stunning of animals results in death before bleeding out (Fuseini *et al.,* 2016). However, research has demonstrated that there are some forms of stunning that support the recovery of animals (Wotton *et al.,* 2014). Due to the lack of consensus surrounding the acceptability of stunning for halal production, the majority of animals are slaughtered without any form of stunning (Adzitey *et al.,* 2011; Annan-Prah *et al.,* 2012).

Animal welfare concern is limited in Nigeria compared to developed nations. The handling of

animals in developing countries has been a subject of discussion for a long time. For instance, a study in Ethiopia indicated that stakeholders handle animals in an aversive way, and this has been shown to increase the prevalence of death and injuries (Boluwaji, 2022). In Nigeria, there is a weak animal welfare framework. While the hot and wet tropical climate favours livestock production by providing lush rich vegetation for food. there is a very low and unsatisfactory level of understanding and implementation of the obligation to show concern for all aspects of animal well-being in terms of proper housing, management, nutrition, disease prevention, and treatment, responsible care, humane handling and, when necessary, humane euthanasia (Njisane *et al.,* 2019). At present, there are not enough legislations in Nigeria that protect animals from cruel actions by humans. It may be noted that relationship exist between animal welfare and productivity. For instance, moving hens from open pens to cages produces a marked short-term reduction in egg production (Boluwaji *et al.,* 2022). Also, chronic stress can impair immune function and lead to higher disease and mortality rates, leading to reduced production (Burdick *et al.,* 2011). This shows that animal welfare has a far more reaching impact affecting productivity and health. This study therefore aimed to ascertain the knowledge attitudes and perceptions of animal welfare issues such as animal rights, cruelty to animals.

MATERIALS AND METHODS

Study design

This study utilized a cross-sectional survey design to evaluate the knowledge, attitudes, and perceptions of animal welfare.

Survey Instruments

A structured questionnaire was developed pretested and validated using Google Forms. The questionnaire comprised both open-ended and closed-ended questions. It was divided into several sections to capture respondent demographics, knowledge of animal welfare, perceptions of cruelty to animals, and attitudes towards animal stunning and slaughter. The experiment lasted from November, 2023 – June, 2024.

Sample Population

The target population for this study included residents from all 36 states and the Federal Capital Territory of Nigeria.

Data Collection

The questionnaire was distributed online via email and social media platforms, Additionally, face-to-face interviews were conducted to ensure a diverse representation of respondents.

Ethical Considerations

Participation in the survey was voluntary, and informed consent was obtained from all respondents. The confidentiality and anonymity of the respondents were maintained throughout the study.

Reliability Testing

The internal consistency of the questionnaire was assessed using Cronbach's alpha. A Cronbach's alpha value of 0.70 or higher was considered acceptable for the reliability of the questionnaire.

Knowledge Assessment

Knowledge scores were calculated based on the correct responses to knowledge-based questions.

The scores were then categorized into different levels (low, moderate, high) to assess the overall knowledge of animal welfare among respondents.

Attitudes and Perceptions Analysis

Respondents' attitudes and perceptions were analyzed using Likert scale responses. The mean scores for each item were calculated and compared across different demographic groups (e.g., age, gender, education level) using independent samples t-tests and ANOVA, where appropriate.

Statistical Analysis

Descriptive statistics (mean, standard deviation, frequencies and percentages) were used to summarize the demographic characteristics of the respondents, as well as their knowledge, attitudes, and perceptions of animal welfare. Frequency distributions and percentages were calculated for categorical variables. The responses from the respondents in the knowledge-based assessment were transformed into mean scores. The results were presented in tables to facilitate interpretation. All statistical analyses were performed using SPSS (Statistical Package for the Social Sciences) version 26.0.

RESULTS

A total of 694 respondents from the 36 states of the Federation and the Federal Capital Territory Abuja. The questionnaire survey was from November 2023 – June 2024 and responses were divided into respondent demographics, respondents' knowledge of animal welfare, perceptions about cruelty to animals and perceptions of stunning and slaughter. Table 1: represents respondents demographics in sex, religion, education and age. Table 2: shows respondents knowledge and understanding of animal welfare and animal freedoms. Table 3: shows the perception of cruelty to animals among respondents revealing their understanding of animal cruelty and identification of forms of cruelty. Table 4: represents the perception of respondents to animal stunning and slaughter with respondent supporting legislation to encourage stunning of animals before slaughter,

Table I: Demographics of Respondents

Question/Responses	No of Respondents	Percentage (%)
Gender		
Male	436	62.8
Female	258	37.2
Religion		
Christianity	548	79
Islam	137	19.7
Traditionalist	2	0.3
Atheist	2	0.3
Others	5	0.7
Education		
None	0	0
Primary	0	0
Secondary	13	1.9
Vocational/Technical	12	1.7
Tertiary	467	67.6
Veterinary/Animal Scientist/Paraveterinary background	200	28.8
Age Group (Years)		
18 – 29	173	24.9
30 39	216	31.1
40 – 49	204	29.4
50 – 59	82	11.8
≥ 60	19	2.7

Table 2: Knowledge and understanding of animal welfare among respondents

Question/Responses	No of Respondents	Percentage (%)	Meanscore
Are you aware that animals have freedoms that enhance their welfare?			
Yes	616	88.8	0.92±0.26
No	46	6.6	
I don't know	13	1.9	
Is freedom from hunger and thirst reasonable for animals?			
Yes	667	96.1	0.97±0.26
No	14	2	
I don't know	13	1.9	
Is freedom from pain, injury and disease reasonable for animals?			
Yes	667	96.1	0.97±0.15
No	14	2	
I don't know	13	1.9	
Is freedom from discomfort by providing appropriate environment reasonable for animals?			
Yes	670	96.5	0.97±0.15
No	14	2	
I don't know	10	1.4	
Is freedom to express normal behaviour reasonable for animals?			0.94±0.20
Yes	639	92.1	
No	23	3.3	
I don't know	32	4.6	

Is freedom from discomfort by providing appropriate environment reasonable for animals?

Yes	628	90.5	0.93±0.24
No	35	5	
I don't know	31	4.5	

Table 3: Perception of cruelty to animals among respondents

Question/Responses	No of Respondents	Percentage (%)
Have you ever owned pets?		
Yes	598	86.2
No	96	13.8
What kind of pet/animal did you keep?		
Dogs	332	47.8
Cats	90	13
Chicken	160	23.1
Goat	147	21.2
Sheep	64	9.2
Guinea pigs	19	2.7
Fish	26	3.8
Rabbit	26	3.8
Pig	45	6.5
Snail	13	1.9
Pidgeon	6	0.9
Turkey	19	2.7
Geese	13	1.9
Parrots	6	0.9
Tortoise	6	0.9

Do you understand what cruelty to animals means?

Yes	606	87.3
No	79	11.4
I don't know	9	1.3

Have you ever witnessed any form of cruelty to animals?

Yes	562	81
No	103	14.8
I don't know	29	4.2

Is hoarding of animals a form of cruelty?

Yes	417	60.1
No	277	39.9

Is violence to animals a form of cruelty?

Yes	597	86
No	97	14

Is lack of provision of food and water a form of cruelty?

Yes	583	84
No	111	16

Is lack of provision of shelter a form of cruelty?

Yes	530	76.4
No	164	23.6

Is poor sanitary conditions a form of cruelty?

Yes	523	75.4
No	171	24.6

Is abandonment of animals a form of cruelty?

Yes	499	71.9
No	195	28.1

Is running over animals with vehicles a form of cruelty?

Yes	510	73.5
No	184	26.5

Is transporting animals in wrong vehicles a form of cruelty?

Yes	439	63.3
No	255	36.7

Is lack of provision of veterinary care a form of cruelty?

Yes	531	76.5
No	163	23.5

Will you be willing to report cases of cruelty to animals?

Yes	514	74.1
No	52	7.5
I don't know	128	18.4

Will you support the enforcement of relevant legislation on cruelty to animals against offenders?

Yes	606	87.3
No	27	3.9
I don't know	61	8.8

Table 4: Perceptions of animal stunning and slaughter

Question/Responses	Number of respondents	Percentage (%)
Do you eat meat?		
Yes	691	99.6
No	3	0.4
What animals do you consume as meat?		
Chicken	672	97.1
Goat	642	92.8
Cattle	628	90.8
Sheep	521	75.3
Fish	502	72.5
Rabbit	359	51.9
Pig	273	39.5
Camel	92	13.3
Donkey	14	2
Horse	12	1.7
Bushmeat	11	1.6
Others	10	1.5
Do you think animals are conscious and aware at the time of slaughter?		
Yes	475	68.5
No	87	12.5
I don't know	132	19
Are animals stunned before slaughter in your area?		
Yes	112	16.2
No	441	63.5
I don't know	141	20.3

Do you think stunning animals before slaughter is more humane method?

Yes	357	51.4
No	194	28
I don't know	143	20.6

Does it matter to you that animals do not suffer during slaughter?

Yes	469	67.6
No	125	18
I don't know	100	14.4

Do you think stunning reduces the quality and taste of meat?

Yes	86	12.4
No	358	55.9
I don't know	220	31.7

Would you prefer to consume meat from animals stunned before slaughter?

Yes	217	31.3
No	246	35.5
I don't know	231	33.2

Do you prefer meat slaughtered without stunning?

Yes	264	38.6
No	244	35.2
I don't know	182	26.2

Would you support legislation to encourage stunning before slaughter?

Yes	348	50.1
No	195	28.1
I don't know	151	21.8

DISCUSSION

Out of the 694 respondents, 62.8% were male and 37.2% were female and this agrees with Sinclair *et al.,* (2023) who recorded 58.1 % and 39.6%

male and female respondents respectively in Nigeria. There respondents religious affiliations were Christianity, Islam, traditionalist and atheist respectively. This agrees with Sinclair *et al.,* (2023) who reported 79.5% and 17.4% for Christianity and Islam respectively from Nigeria. The 30 – 39 years age group had the highest percentage (31.1%) of respondents which was similar to Sinclair *et al.,* 2023 who had 25.2% in the 30 – 39 years age group out of 298 respondents in their study.

All respondents (100%) had at least a secondary/high school education and could be termed literate and this also could be supported by the fact that the major means of deployment of the questionnaire was by emails and on social media platforms. To the question posed about perception and understanding of animals, 88% admitted to being aware that animals possess freedoms generally. Response to the agreement to specific animal freedoms ranged from 90.5 – 96.5% in the affirmative, these would suggest that respondents possessed adequate understanding of what constituted animal welfare, this may be attributable to education and be in agreement with Baatz *et al.,* (2020) who demonstrated that education positively correlated with better animal welfare outcomes.

Majority of respondents (88%) claimed to owned a pet or animal, implying that animals play a role in families either for companionship, food or monetary benefits (Matchock, 2015). A high percentage of respondents (87.3%) stated that they understood what cruelty to animals and they demonstrated it in the diversity of definitions the offered and 81% admitted to having witnessed acts of cruelty against animals. this supports the finding of Minka and Ayo (2017) who identified common acts of cruelty in the onloading, transportation and offloading of animals.

Hoarding of animals is a situation where an individual keeps more animals that he can cater for. Majority of the respondents accepted that hoarding is a form of cruelty to animals (Patronek 1999). In typical cases of hoarding the animals are under-fed, live in unhygienic environments and conditions, lack access to veterinary care and this negatively impacts their health and welfare (Arluke *et al.,* 2017). In its extreme form hoarding is considered in the spectrum of obsessive-compulsive disorder (OCD) in humans occurring more in females than males (Felthous and Calhoun, 2018; Lockwood, 2018). Violence to animals was believed to be an expression of cruelty to animals by a majority of respondents. Violence characterized by beating of animals, twisting their tails, choking them to death and association of animals with witchcraft have all been documented as occurring to animals in Nigeria. (Elisha and Ponman, 2008; Minka and Ayo, 2017; Atere *et al.,* 2023; Enemchukwu, 2024; Yakubu *et al.,* 2024). Lack of provision of adequate food and water for animals was considered cruelty by 87% of respondents as this would imply starvation of animals, this has been implicated as major reason of calf mortality in Nigeria among individual animal holders, private farms and research farms (Dipeolu, 1996; Uza and Abdullahi-Adee, 2005; Enemchukwu, 2024). There is need to ensure that animal owners place a priority on the feeding and watering of their animals.

Lack of shelter was deemed cruelty by 76.4% of respondents as this infringes on their welfare by exposing them to inclement weather including rains and excessive heat. Lack of shelter predisposes animals to roaming, becoming feral,

and being nuisances to the immediate environment as well as complicating the control of diseases like rabies and increases vulnerability to further cruelty (Reese *et al.,* 2020; Mshelbwala *et al.,* 2021; Abubakar *et al.,* 2024). Animals kept and maintained under poor sanitary conditions was also considered a form of cruelty by 75.4 % of respondents, this agrees with known facts that such conditions lead to a buildup of pathogenic organisms and endanger the health and welfare of animals as previously reported by (Ryden *et al.,* 2022). A total of 75.5% of respondents agreed that deliberate roadkill of animals was cruelty. Roadkill of animals has been attributed to some cultures, negative connotations of some animals with evil, some consume rare delicacies they run over and some just for the fun of it (Lala *et al.,* 2021; Enemchukwu, 2024).

Wrongful, inadequate or inappropriate transportation of animals induces; stress, injuries and even death of animals as they are transported without adequate considerations of their needs and welfare (Adenkola and Ayo, 2010; Navarro *et al.,* 2019). In this study 63.3% of respondents affirmed that poor transportation of animals constitutes cruelty as poor transportation raises stress levels in animals, causes physical trauma and injuries and in extreme conditions cause death of the transported animals (Ayo and Minka, 2017). To the question "does a lack of veterinary care constitute cruelty?" 76.5% concurred that it was cruelty this omission impacts animal health, reduces life expectancy, increases the risk and occurrences of diseases and hinders optimal productivity (Bellemain 2013; Doyle *et al.,* 2021). In this study 74.1% of responses stated that they would be willing to report cases of animal cruelty to the relevant authorities. This would greatly improve animal welfare if such cases are duly prosecuted to the logical conclusion, In Nigeria

the prosecution of animal cruelty cases rarely occurs and the punishments by law need reviewing. (Boluwaji *et al.,* 2022). Majority of the respondents 87.3% would support relevant legislation and the enactment of new legislation that would wholistically address the problems of animal welfare in the country. Nigeria does not have a stand-alone legislation regarding animal welfare, the Nigerian criminal code does, include many prohibitions regarding animal cruelty and the wording suggests some acknowledgement that animals can suffer both physically and mentally. The National animal welfare strategy produced in 2016 is the basis of revision to legislature, similarly, the criminal code of 1990 provides specific protection for some categories of animals (Ibitomi, 2023). Such as those used for draught purposes for whom it prohibits to overload and overwork and a national ban on animal fights. The animal disease control act of 2004 provides some additional protections for farm animals including limiting stocking densities during transportation to ensure adequate ventilation. Nevertheless, it remains a source of concern that no singular legislation exists to prevent animal cruelty or to promote animal welfare in Nigeria (API, 2022). Table 2 shows the knowledge and understanding of animal welfare among respondents. The high knowledge of animal welfare, with means close to 1.0, indicates that the majority of respondents are very knowledgeable about animal welfare. The standard deviations are relatively low, suggesting that there is not much variability in the responses, with most respondents showing vast knowledge about animal welfare. These results reflect a significant level of awareness among Nigerians regarding the fundamental aspects of animal welfare. The respondents' high level of knowledge about animal welfare freedoms—such as freedom from hunger and thirst, freedom from pain, injury,

and disease, and freedom to express normal behavior—suggests a strong foundational understanding of animal welfare principles. Several factors could contribute to this high level of knowledge. Increased media attention, educational campaigns, and the efforts of non-governmental organizations (NGOs) in promoting animal welfare in Nigeria may have played crucial roles. For instance, organizations like the Nigerian Society for the Prevention of Cruelty to Animals and World Animal Protection have been actively involved in raising awareness about animal welfare issues across the country (World Animal Protection, 2020). Additionally, the cultural context in Nigeria, where animals play a significant role in agriculture and daily life, might drive a natural inclination towards understanding and valuing animal welfare. As suggested by Ajala et al. (2021), the cultural significance of animals in Nigerian society could influence the high levels of knowledge observed in this study. Furthermore, the relatively low standard deviations across the knowledge questions indicate a consistent understanding of animal welfare principles among respondents, which might be attributed to the effectiveness of educational initiatives and public awareness campaigns. According to Oluwatayo and Oluwatayo (2012), education significantly impacts the knowledge and perceptions of individuals regarding animal welfare. Therefore, the consistency in the responses reflects the positive outcomes of educational efforts in Nigeria.

Majority (99.6%) of respondents stated that they consume meat agreeing with works by Adekunmi *et al.,* (2017), Obayelu *et al.,* (2022) and Petrikova *et al.,* (2023) who all reported that meat is a major source of protein consumption in Nigeria. High number of respondents who identified that animals were conscious and aware at the point of slaughter and this is in conformity with the earlier observation by Zoethout (2013), which also stated that animals were sentient and aware at slaughter. Majority of respondents admitted that there was no stunning of animals before slaughter in their locality, this agrees with Njoga *et al.,* (2023) which reported that no stunning occurred in abattoirs visited in southern Nigeria and this may also hold true for other regions of the country. To the question "do you think stunning before slaughter is a humane method?" 51.4 % replied in the affirmative, 28 % replied in the negative and 20.6 were undecided. There are arguments for and against stunning before slaughter, there are religious views in Islam that stunning does not fully comply with halal slaughter and that non stunning slaughter achieves a higher bleeding rate than with stunning (Yardimici, 2019; Riaz *et al.,* 2021).

Most of the respondents did not believe that stunning of animals affected the quality of the meat, thus stating that stunning does not impact on the quality and taste of meat. A majority of respondents stated a preference for meat from unstunned animal and this preference for meat from unstunned animals could be due to religious reasons as postulated by Rahman (2017), another view held is that stunned animals do not bleed out as efficiently as non-stunned animals (Agbeniga and Webb, 2012) and that non stunned animal meat preserved better and longer than meat from animals that were stunned (Nakyinsinge *et al.,* 2014; Riaz *et al.,* 2021).

More than half of the respondents would support legislation encouraging stunning before slaughter. This response shows the majority support animal welfare by trying to ensure the reduction of stress, anxiety and pain in animals for slaughter. This would also reduce the emotional and mental

trauma that abattoir worker undergoes in the course of discharging their duties, some have reported experiencing post-traumatic stress disorder (PTSD) (Liebler *et al.,* 2017; Slade and Alleyne, 2023).

In conclusion, the high level of knowledge demonstrated in this study is encouraging and shows the progress being made in animal welfare awareness in Nigeria. Continued efforts in education and advocacy are essential to maintain and further enhance this understanding across different regions and communities in the country. Respondents also showed a willingness to support the enforcement of animal cruelty laws and new legislation to encourage stunning of animals before slaughter. More effort in animal rights and welfare advocacy may still be required despite the positive results from this study.

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