



---

## **Dog Fancying and its Social Problems: Analysis of Dog Keeping Problems and Social Dimension of its Peculiarity in Ibadan Metropolis, Nigeria**

---

Taiwo A. AKINYEMI<sup>1</sup>

### **Abstract**

Humans have coexisted with animals for centuries for the purposes of domestication, companionship, and ecological interactions. However, this bond is not without its challenges; it carries risks for humans that must be taken seriously and addressed appropriately. This study examined the various challenges peculiar to dog keeping in the Ibadan metropolis, Nigeria. The study adopted a quantitative approach to data collection, with 200 volunteers from the pool of dog enthusiasts across the headquarters of eleven (11) local governments, and made use of Robert K. Merton's strands of functionalism for solidification. The findings show that there are certain social problems peculiar to dog keeping that could constitute a threat to humans. It concludes that measures should be in place for total compliance - on the part of dog owners - with all regulations such as obtaining all needed vaccines for dogs that will help to save lives, curbing the spread of diseases that may be contracted, and ultimately, promoting life on earth for both human and non-human beings.

**Keywords:** Dog, Human, Social Problem, Society, Development.

### **Introduction**

It is not surprising that dogs are referred to as man's best friend and the most beloved animal by the majority of humans (Duffy & Serpell, 2012). The reasons for this are not far-fetched. They include wonderful companionship, provision of many emotional and physical benefits, the beneficial effects of having them, and the ability of dogs to

---

<sup>1</sup> Department of Sociology, Hallmark University, Ijebu-Itele, Ogun State, Nigeria. He is a Doctorate student in the Department of Sociology, University of Ibadan, Nigeria, specialising in Sociology of Development. His research interest revolves around development sociology, political sociology, sociology of religion, and sociology of animals.

*Corresponding author's e-mail:* [akinyemitaiwoakin@gmail.com](mailto:akinyemitaiwoakin@gmail.com)

form a lovable bond with human beings (Motari & Godwin, 2007; Aiyedun & Olugasa, 2012). The most obvious benefits of dog ownership are love and companionship. Human beings tend to do finer medically and emotionally when securely attached to a dog simply because of the unconditional love a dog provides. Comparatively, unlike human-to-human relationships, dogs will always accept the owner (Bryan & Cummis, 2002; Akinluyi, 2014).

Dog keeping has a way of providing a sense of purpose and a feeling of validation (Chaix, 2002). The emotional benefit of having a dog can snowball into a physiological one. Also, an attachment to this living creature usually creates a sort of biological brain-effect that often reduces stress, aids human's breathing rate, lowers blood pressure, increases capacity for oxygen consumption, and lowers anxiety level (Duffy & Serpell, 2012; Hsu & Serpell, 2003). There is a connectivity of oxytocin boost when the dog and the human 'owner' stare into the eyes of each other. More so, another physical benefit of owning a dog comes from the activity necessary to take care of it, such as playing with the dog or taking it for a walk (Svertberg, 2006; Swart, 2019). However, dog keeping is not without challenges. Its keeping may be very interesting, tempting, and rewarding; yet, it is an experience with pros and cons (Chax, 2002; Aiyedun, 2011).

According to Larson and Karlsoon (2012), sanitary risks are also fundamental in the analysis and understanding of dog related social problems, dog can carry parasites that can be transferred to humans, especially humans with compromised immune systems. Dog feces can lead to illnesses in humans. While many people enjoy the companionship of dogs, there are also cases of allergic reactions in some dog ownership that should be considered. Being physically and mentally present and ready at all time for your dog is another challenge associated with dog keeping. You have to be physically and mentally able to care for them, you will need memory skills to remember to feed them, the energy, strength, and mobility to feed them, play with them to ensure the dog maintains a good state of health. Additionally, it is important to address its emotional needs, manage the mess after daily walks, and ensure you have the financial means to cover pet food, grooming, and routine veterinary visits based on your dog's health requirements (Marvin & Susan, 2010).

Excessive and uncontrollable barking in dogs presents a unique set of challenges for pet owners, especially when the barking occurs at night or in cases of separation anxiety, such as when leaving the house or dealing with whining puppies. Again, zoonotic diseases that can easily transfer to humans are a concern, especially when it comes to indoor urination and defecation by dogs. These issues can test an owner's patience, as they navigate choices around feeding—particularly with picky eaters. Understanding canine communication is crucial, along with the need to leave

work early to care for them. Managing destructive behaviours, dealing with odors, handling aggression, and preventing dogs from wandering outside their safe spaces can be challenging (Svartberg, 2006; Olugasa, Aiyedun & Akingbogun, 2009).

Dogs embody the bridge between the untamed and the domesticated, navigating the complex realms of the wild and human society. They accompany their owners under the cover of night, seek out threats, guard boundaries, detect unfamiliar faces, pursue game, safeguard homes, and leave traces throughout our histories. Conversely, they also inhabit the role of scavengers, existing at the edges of civilization, sometimes seen as harbingers of disease and disruptors of urban order (Svartberg, 2006; Hsu & Sun, 2010).

While dogs play a vital social role in human existence, many owners find themselves ill-equipped to handle the demands of dog ownership, especially when it comes to understanding the responsibilities of being a perfect guardian for their pets (Kennedy & Zahorsky, 1997; Bryan & Cummis, 2002). Individuals should not become overly reliant on the assistance this animal provides, especially when they are also expected to offer a comparable level of care in return, as this is essential for the mutual survival and well-being of both species. Many individuals perceive pet companionship merely as a form of care service, often overlooking the complexities and difficulties that come with it, and are generally unprepared for the associated challenges (Aiyedun and Fayemi, 2011; Lemish 1996; Swart 2019).

Caring for a dog is a significant commitment that demands thorough preparation. It's not something one should hastily decide upon. Potential pet owners should take the time to carefully plan, visit reputable centers, and educate themselves about the responsibilities and challenges associated with dog adoption and ownership (Hall & Wynne, 2012; Karen, 2017). Owning a dog carries significant responsibilities; however, by embracing this role, we not only enhance our self-esteem through the fulfillment of our duties but also reaffirm our ability to care for another being, in addition to ourselves. Moreover, having a dog adds valuable structure to our daily routines" (Duffy & Serpell, 2012; Miklon, 2007).

It is important to recognise that, while having a dog can bring immense joy and many benefits, as supported by both personal experiences and research, there are also considerable challenges that come with pet ownership. Unfortunately, there is a lack of empirical studies focused on this issue, largely due to the prevailing human-centric perspective in social science that often neglects the complexities of animal relationships. This gap represents a significant epistemological oversight that requires the attention of scholars. While these challenges can be multifaceted and complex, many individuals tend to overlook them when deciding to adopt a dog. This may stem

from a lack of awareness about the responsibilities and tasks involved in dog ownership (Duffy & Serpell, 2012).

### **Merton's Strands of Functionalism: Sociological Theorising**

It is reasonable to assert that dogs can play either a functional or dysfunctional role within society. 'Functional' generally refers to the outcomes perceived by observers – often scientists – rather than the lived experiences of social participants. These perceived outcomes usually contribute to the adaptation or adjustment of societal systems. Conversely, not every aspect is beneficial; dysfunctions may arise, presenting consequences that hinder a system's adaptation or adjustment.

While manifest functions are intended or recognised consequences of any social patterns, social actions, social formations, or the structure that comes to being through the instrumentality of the social actors 'people'. On the other hand, latent functions are the unintended consequences of any social patterns, social formations, social actions, or structure. Latent functions have a way of opening once eyes to see deeper, especially hidden meanings, consequences of our social practices, choices, "social action" and its overall social implications "social reality".

For example, think of Emile Durkheim's famous analysis of the social functions of punishment for committing a crime, its immediate manifest function is obvious; everyone knows it. It reminds the criminal that the society would not permit his deviance, but then, it has a latent function too, which is not generally recognized, the latent function Durkheim would argue is not what happens to the criminal as a punishment; rather, it is deeper, it intensifies society's faith in its collective conscience "social contract", the punishment of the criminal is an occasion that reminds the society of its force and its collective morals.

The overall of what humans stand to gain as an advantage while keeping dogs is what constituted the manifest function. These include wonderful companionship, emotional and physical benefits, biological brain-effect that often reduces stress, its impact on one's breathing rate, blood pressure, oxygen consumption, anxiety level, connectivity of oxytocin boost, the dog being trained for research, rescue mission, location of people either lost or injured, home guards, assistance for hunting wildlife, health promotion of the humans, a guide to the blind, the deaf, help to those that have impairment in their mobility, adjustment of the elderly, aids to recovery from illness, curbing of criminality, the discovery of explosives and source of income for significant fractions of people, among others. While latent function consequences are those without envisaged consequences which are usually at both the macro and micro levels,

which often has a multiplier effect on the larger society and its tendencies to snowball into social problems rather than stopping at personal problems.

At the micro-level analysis, there are various considerations to take into account. For instance, sanitary concerns arise from the potential for dogs to harbor parasites that can be transmitted to humans, particularly those with weakened immune systems. Additionally, dog feces pose numerous health risks, and certain individuals may experience allergic reactions to dogs. The responsibility of dog ownership entails meeting the daily needs of pets, which requires memory and organisation to ensure they are fed regularly and that clean-up occurs after walks. Financial capability is also essential, as well as navigating social stigma based on the breed of dog owned. Some people may hold prejudices influenced by their religious beliefs or personal experiences, leading them to judge dog owners unfavourably. Moreover, there are serious concerns such as dog attacks and bites, excessive barking, aggressive behavior, and unpleasant odors. Risks of diseases like rabies also exist, alongside issues such as dogs jumping on people, straying into public spaces which can cause panic and potentially lead to stampedes. Lastly, pet owners must be aware of certain transferable medical concerns, including tuberculosis, avian influenza (bird flu), and leptospirosis, among others

At the macro-level, there are underlying functions that indicate a preference for exotic foreign dog breeds over indigenous Nigerian breeds. This trend is manifested through the importation of these exotic breeds and their accompanying foreign accessories, which significantly increases the volume of imported dogs. This importation trend not only impacts individual expenditures but also has substantial implications for national resources. For instance, nearly all security agencies in Nigeria rely on exotic dog breeds, leading to a significant waste of national resources and a level of extravagance that is quite concerning.

### **Canine Aggression**

Canine aggression has been tipped as one major hazard of dog keeping. Canine aggression presents serious public health economic and animal welfare concerns. The empirical reports have it that, hospital emergencies treat over 300,000 dog bite-related injuries per year in the U.S.A alone, nearly half of which involve children under the age of 15 years. It was reported that between 2-4% of all dog bite cases required hospitalisation (Svartberg, 2006). There are also cases where dog owners are forced to relinquish their dogs due to behavioural problems or to put to sleep “killed”. When behaviour was the only reported reason for relinquishment, aggression was the most frequently cited problem, 40% of dogs bite went unreported except it required serious medical attention (Pratik, 2010; Hall & Wynne, 2012).

Dog bite statistics are often misleading for several reasons:

1. most dog bites go unreported unless medical attention is sought (which may be more likely with larger breeds that can inflict more serious injury);
2. the total number of dogs of a given breed in the local community is seldom known, so the rate at which that breed is overrepresented among reported dogs is often undetermined; and
3. in many instances, the breed of dog involved cannot be confirmed (Motari & Goodwin, 2007).

Breed-specific data on aggression derived from behavioural clinic/consultant caseloads are also likely to be unrepresentative (Motari & Godwin, 2007). Marvin and Susan (2010) rather pioneered the use of animal "experts" - "Veterinarian and obedience judges" as sources of information on the prevalence of various desirable and undesirable behaviours among popular dog breeds. Their methods, which involve asking experts to rank breeds on a series of traits, have also been applied to studies of breed differences (Hsu & Serpell, 2003). It is difficult to be sure whether agreement among experts about the aggressiveness of a particular breed reflects true consistencies in breed behaviour or simply shared stereotypes. In contrast to opinions based upon generalisation, assessments derived from individual dogs may be less susceptible to bias related to breed stereotypes (Motari & Goodwin, 2007; Svertberg 2006).

Fear/anxiety and anger/aggression greatly influence health, quality of life, and social interactions. They are nightmares to social wellbeing for both personal and public economics. Although much is known about the physicality/physiology and neuroanatomy of such emotions, little is known about their genetics "which is the real factors contributing to the outer reactions e.g. aggression. This in a way is similar to human being, most importantly why some individuals are more susceptible to pathology under stress (Svertberg, 2006). There are other miscellaneous problems associated with keeping a dog, ranging from persistent/uncontrollable barking "creation of nuisance in the/within the neighborhood, house soiling, escaping/roaming of the owners' premises, dog straying particularly to the public space and creating a social stampede, unrest, social panic, among others (Hsu & Serpell, 2003; Karen, 2017).

## Methodology

The study was conducted in the Ibadan metropolis, which has eleven (11) Local Government Areas for administrative purposes. Five (5) urban Local Government



areas and six (6) semi-urban Local Government areas were selected to allow for inclusiveness that would accommodate the two breeds of dogs under survey.

The study was guided by those who have experience related to Dog keeping/adoptions. From these categories of Dog enthusiasts, the study was able to enlist and select 200 volunteers/respondents who participated in the study across the headquarters of the 11 local government areas in Ibadan. The enlisted and selected 200 volunteers/respondents were made up of Nigerian Indigenous Dog Breeders (NIDB), Exotic Foreign Dog Breeders (EFDB), and NIDB EFDB combined. Having clustered respondents based on the local government authorities' demarcation, the sampling size was also narrowed down to the headquarters of each eleven (11) local government authorities, wherein judgmental/purposive sampling techniques (non-probability sampling) were then employed to determine the respondents for this quantitative study.

## Results and Findings

**Table 1: Findings**

| S/No    | Variables   | Category  | Nos   | %   |
|---------|---|-----------|---|---|
| 1       | Are there peculiar problems/challenges associated with dog keeping in Nigeria?  | Yes<br>No | 151<br>-----  | 100   |
| 1b      | <b>Explanations</b><br>Cases of biting "owners and relatives"<br>Excessive and uncontrollable barking<br>The inability of the owner to employ an expert to train their dog thus, dogs become difficult to control<br>Aggression<br>Offensive smelling "odor"<br>Rabies contraction<br>Undue jumping at someone<br>Cases of dog straying and attacks on strangers<br>Lack of facilities provision by the owners to keep their dogs |           | 40<br>25<br>10<br><br>10<br>10<br>20<br>4<br>16<br>16 | 26.5<br>16.16<br>6.6<br><br>6.6<br>6.6<br>13.2<br>2.6<br>10.6<br>10.6 |
| 2       | Are there peculiar challenges to having/keeping Nigerian Indigenous Dogs (NIDs)?<br><b>Identified challenges</b><br>Loosely sneaking out, littering the street, and the public bins<br>Likelihood of belittling status of the owners by the general public<br>Cases of harassment of the NIDs on the street as a result of sneak-out  | Yes<br>No | 151<br><br>50<br><br>70<br>31                         | 100<br><br>33.1<br><br>46.3<br>20.5                                   |
| 3<br>3b | Are there peculiar challenges associated with having exotic breeds?<br><b>Indicated challenges</b><br>It's expensive nature<br>Cases of rabies by the Exotic breeds<br>Undue barking and harassment of the third party<br>Undue biting and cases of eventual death which usually go unreported  | Yes<br>No | 151<br><br>31<br>30<br>20<br>35                       | 100<br><br>20.5<br>19.9<br>13.2<br>23.2                               |

|   |   |           |  |  |
|---|---|-----------|--|--|
|   | Cases of attack on the owners<br>Whenever it accidentally sneaks out, it usually creates undue public panic and tension.  |           | 20<br>1.5  | 13.2<br>10   |
| 4 | Are there cases of medical condition transferrable to the owner or neighborhood?<br><b>Indicated cases of zoonotic diseases</b><br>Rabies<br>Tuberculosis<br>Avian influenza “bird flu”<br>Leptospirosis  | Yes<br>No | 151<br>-----<br><br>80<br>30<br>30<br>11                         | 100<br><br><br>53<br>19.9<br>19.9<br>7.2                                   |
| 5 | Are there areas we can improve upon as a country in meeting up to the challenges surrounding having dogs in our society?<br><br><b>Indicated way forward</b><br>Penalty to the owners whose dogs stray<br>Penalty to the owners whose dogs bite in public space<br>Regulation to ensure that all dog vaccinations are up to date<br>All dogs should be exposed to basic command training early enough to mitigate against undue toughness to handle<br>Proper clinic records of all dogs<br><br>Do you think dog-keeping policy and legislation should be country-specific? | Yes<br>No | 151<br>-----<br><br>31<br>30<br><br>20<br><br>35<br><br>20<br>15 | 100<br>-----<br><br>20.5<br>19.9<br><br>13.2<br><br>23.2<br><br>13.2<br>10 |
| 6 | <b>Reasons</b><br>NIDs should also be involved in research and teaching not only Exotic breeds by local scientists.<br>Each country of the world with its peculiar historical antecedents, culture, climate, and different breeds, consequent upon what becomes dogs of every clime<br>It will help to fully know and reap the full potential of Indigenous dogs.<br><br>For proper accountability and a sense of being responsible   | Yes<br>No | 151<br>-----<br><br>80<br><br><br>30<br>30<br><br>11             | 100<br>-----<br><br>53<br><br><br>19.9<br>19.9<br><br>7.2                  |

Source: Researcher’s Field Survey (2025)

## Discussion of Findings

All respondents acknowledged that there are various challenges associated with dog ownership in the country. Notably, 26.5% highlighted incidents of biting, affecting both owners and relatives, emphasizing the frequent occurrences of aggressive behavior. Additionally, 16.6% of respondents reported concerns about excessive and uncontrollable barking in their neighborhoods. Another 16.6% expressed frustration with the reluctance of many owners to hire professional dog trainers, viewing this as a significant issue in responsible dog ownership. Furthermore, 6.6% noted concerns regarding unpleasant odors resulting from the poor hygiene practices of some owners.



Finally, 13.2% of respondents raised alarms about the potential risk of rabies transmission from dogs to humans due to biting incidents, whether intentional or accidental.

Furthermore, 2.6 % of the respondents also expressed concerns, seeing dogs jumping at both the owners or any passers-by, especially those dogs that lack emotional cares from the owners, 10.6% of the total population of the respondents see cases or situation where dogs stray away from their original house, get to the public space and pick at and attack any passers-by, 10.6 % also demonstrated worries over lack of facilities provision by the owners to keep their dogs in their compound, with no adequate perimeter fencing to forestall any chances of the dog getting to the public space, this among others often precipitate a situation which often results to hostility within the neighborhoods. This implies that many challenges are peculiar to dog keeping in the country, by and large, often have a social bearing on the people of a given area. This report aligns with a previous study indicating that dogs frequently bite their owners and family members, with many incidents going unreported unless medical attention is necessary (Motari & Godwin, 2007).

On whether there are peculiar challenges limited to having/keeping Nigerian Indigenous Dogs (NIDs), 100% of the respondents affirmed that there are challenges. 33.1% of the total population of the respondents opined that there are cases of NIDs loosely sneaking out at will to the public domain, littering the public space, the street and scavenging the public bins with its likelihood of disease spreading. 46.3% of the respondents also expressed worry over the societal attitude towards the owners of the NIDs. They often express certain attitude by way of belittling their social status and social position just because they keep NIDs and not exotic breeds. They often consider that those who are struggling financially are the set of people caught keeping the NIDs. According to the responses, 20.5% of participants noted difficulties with harassment and bites from NIDs affecting passersby in public areas. They viewed this as a major obstacle alongside other challenges linked to NID management. This suggests a clear acknowledgment of the distinct issues tied to NID care, with societal perceptions being the most critical challenge.

On the peculiar challenges associated with exotic breeds, 100% of the total population of the respondents opined that, truly, certain challenges cannot be swept under the carpets, and these challenges are especially peculiar to exotic breeds. 20.5% of respondents expressed worry over how expensive the so-called exotic breeds are. 19.9% of the population of respondents singled out cases of rabies being transmitted to humans via biting and cases of failed vaccination for anti-rabies and non-vaccination of some dogs. According to the respondents within this bracket, this constituted a huge challenge/problem associated particularly with the exotic breeds. 13.2% of

respondents opined that there are cases of public nuisance and uncontrollable excessive barking of dogs in the neighborhood. 23.2% of respondents attest to the rampant cases of undue biting and cases of eventual deaths associated with dog biting. 13.2% of the population of respondents also expressed worry over cases of alarming deliberate attack of dogs on the owners, especially breeds that are exotic. 10% of the total population of respondents expressed emotional burden of seeing a stray dog of exotic origin in the public domain, which often leads to public tension, panic, and likely unrest as a result of the carelessness of the owners.

Furthermore, cases of certain medical risks are capable of being transferred to the owners and relatives. 100% of respondents attest to the transferability of certain diseases to people, called zoonotic diseases. 53% of the diseases transferred by dogs to humans were rabies, 19.9% of the accounted diseases to human was tuberculosis, another 19.9% was avian influenza while leptospirosis accounted for 7.2%. These diseases should always be looked out for and efforts should be made to address them. This report is actually in line with the study by Hsu & Serpell (2003), which stated that there are certain social problems associated with dog keeping/adoptions that go beyond persistent/uncontrollable barking, creation of public nuisance in the/within the neighborhood, house soiling, escaping/roaming of the owner's premises, among others.

In an attempt to curb the peculiar dog-related challenges confronting humans, sanctions are necessary. 100% of respondents expressed optimism that the problems could be addressed. 20.5% of respondents felt that severe penalty to the owners whose dogs stray to the public space could help mitigate the problem. 19.9% of respondents felt that penalty should be served to owners whose dogs bite at the public space. 13.2% of respondents opined that there should be regulations in place to ensure that all dogs are constantly vaccinated to avert unwanted circumstances. According to the survey, 13.2% of participants recommended that all dogs, regardless of breed, should undergo early exposure to effective basic command training in order to reduce the likelihood of difficult behavior. Additionally, 10% of respondents emphasized the importance of maintaining accurate clinical records for all dogs to keep track of their vaccination status and schedules. This implies that there are possible measures that can be put in place by owners, government, and concerned groups to ensure a healthy environment for both dogs and humans.

Based on the responses received, it is clear that 100% of respondents agree that dog keeping policies and regulations should be specific to each country. They provided a variety of reasons for their consensus, which can be summarised thus: 53% of respondents suggested that NIDs should be utilized by scientists for research and educational purposes, advocating for a broader focus beyond just exotic breeds; 19.9%

justified the need for country-specific policies by highlighting that each nation has its own unique historical context, culture, and indigenous dog breeds. They argued that these factors necessitate tailored regulations; another 19.9% pointed out that country-specific policies would enhance our understanding of indigenous dogs and help unlock their full potential; and finally, 7.2% of respondents expressed that such tailored regulations would promote accountability, foster a sense of belonging, and encourage proactive responses to challenges affecting both dogs and the human-animal relationship.

## Conclusion and Recommendations

Human society extends beyond the individual, as it is clear that many people deeply depend on their relationships with animals. However, the factors influencing the choice of animal companions remain a topic of ongoing debate. Among all animals, dogs hold a special place as humanity's favourite, making them the most commonly kept companion animals worldwide. The bond between dogs and humans comes with numerous benefits but also presents certain challenges and potential social issues. While dog ownership offers significant advantages based on both personal experiences and research, it is crucial to acknowledge the inevitable difficulties that can arise from caring for a dog. These challenges can, in turn, impact public health. Unfortunately, there is a lack of empirical research on this topic, largely due to the prevailing anthropocentric perspective within social science, especially in the southern hemisphere. This oversight reflects a substantial gap in understanding, which this paper aims to address and explore.

This article also makes some recommendations. First, it is essential to implement measures that ensure dog owners consistently obtain all necessary vaccinations for their pets. This proactive approach can save lives, particularly in instances of aggressive behaviour, leading to improved living conditions for both dogs and humans. Second, all dog owners should consider utilizing the services of a professional dog trainer. The lack of training can lead to numerous issues, and engaging these experts can help prevent potential dangers in the human-animal relationship. Third, the government must adopt proactive strategies to tackle the pervasive problem of quackery in the canine sector. There is a significant prevalence of fraudulent practices and drug abuse concerning dogs, which ultimately affects the health and safety of our society. Fourth, to enhance awareness and understanding of dog-human relationships, it is essential to develop a social-clinical unit linked to existing animal organizations and veterinary clinics nationwide. This initiative will focus on educating the public about necessary measures and crucial information for promoting healthy coexistence between dogs and humans, ultimately preventing issues from escalating into widespread social problems.

## References

- Adedeji, A.O., Ode, I.O., Okonkwo, M.O., Ojezele, T.A., and Abubakar, M.J. (2010). Why is there still Rabies in Nigeria? A review of the current and future trends in the Epidemiology, prevention treatment, control, and possible elimination of rabies. *Br. J. Diary Sc.* 1:10-25.
- Aiyedun J.O. (2011). *Epizootiology of canine rabies in Ilorin, Kwara state, Nigeria*. PhD thesis in the Department of Veterinary Public Health and Preventive Medicine, University of Ibadan, Nigeria.
- Aiyedun, J.O. and Olugasa, B.O. (2012). Use of aerial photography to enhance dog population census in Ilorin, Nigeria. *Sokoto Journal of Veterinary Sciences*, 10 (1), 22-27
- Ajala, O. O. and Fayemi O.E. (2011). A retrospective study of reproductive conditions and requested procedures in dogs in South Western Nigeria. *J Amin. Vet. Adu*, 10(19), 2012-2617.
- Akinluyi J., (2014). Major Breeds of Dog in Nigeria. Dog consultant and expert, jerk's kennels securities, Ado-Ekiti, Nigeria.
- American Kennel Club- April 2000 AKC Board Minutes Website ([http://www.akc.org/breeds/german\\_shepherd\\_dog/](http://www.akc.org/breeds/german_shepherd_dog/))
- Barnard, S., Siracusa, C., Reisner, I., Valsecchi & Serpell (2012). Validity of model devices used to access Canine temperament in behavioral tests. *Applied Animal Behavior Science*, 138, 79-87.
- Beinart, W., Karen, M. and Simon, P. (2013). *Wild things; nature and social imagination*. Cambridge: White Horse Press.
- Bryan D, and Cummins, (2002). *First elation, first dogs; Canadian Aboriginal Ethnocyotology C Calgary*. Detselig Enterprises.
- Busari, D. A., (2013). Structuration Theory: Giddens Explored in Olutayo, A. O. and Akanle, O. (eds) in *Sociological Theory for African Students*. Ibadan University Press, Publishing House, University of Ibadan, Ibadan, Nigeria
- Chaix L., (2002). *Animals and the Dead at Kerma (Sudan) 2500-1500 BC Archaeological Data and Interpretations*. University of Liege.

- Collelt, M.G. (2001). Survey of Canine Babesiosis in South Africa. *J.S Afr Vet Association*
- Cutt, H., Giles-Corti, B., Knuiman, M and V. Burke (2007). Dog ownership, health, and physical activity: A critical review of the interactive. *Health and Place*, 13:261-272.
- Darwin C. (1859). *On the origin of species using natural selection or the preservation of favored races in the struggle for life*. John Murray, London.
- Duffy, D, & Serpell, J, (2012). Predictive validity of a method for evaluating temperament in young guides and service dogs. *Applied Animal Behavior Science*, 138, 99-109.
- Franklin, A. (1999). *Animals and modern cultures. A Sociology of human-animal relations in modernity*. London; Sage.
- Giddens, A. (1996). *Sociology, Revised Edition*. London.
- Gillum, R. F., and Obisesan T.O., (2010). Living with companion animals, physical activity and mortality in a US national cohort. *International Journal of Environmental Research and Public Health*, 7(6); 2452-2459.
- Godwin, A.O., Nzalazhi F., and Saminu ( 2022). The training and use of local hunting dogs for police duties. *International Journal of Law, politics, and Humanities Research*, 24.
- Hall, N & Wynne, C. (2012). The Canid genome: Behavioral geneticists best friends. *Genes Brain and Behavioral*, 11, 889-902.
- Hsu, Y & Sun L, (2010). Factors associated with aggressiveness responses in pet dogs. *Applied Animal Behavior Science*, 123, 108-123.
- Hsu,Y., &Serpell J.A. (2003). Development and Validation of a questionnaire for measuring behavior and temperature traits in pet dogs. *J Am Vet Med. Assoc*, 223, 1293-1300 <https://vetplanets.com/ng/local-dogs-breeds/>
- <https://www.newsweek.com /small-dog-breeds-that don't-bark>
- Hund, W., Charles, M. and Silvia , S., (2016). *Apes, Gender, Class, Race*. Zurich Lit Verlag.

- Karen, L.D., (2017). When and where do dogs improve hunting productivity? The empirical record and some implications for early upper paleolithic prey acquisition. *Journal of Anthropological Archaeology*, 47, 139-151.
- Kennedy K & Zahorsky (1997). Trends in prehistoric technology and biological adaption: New Evidence from Pleistocene deposits at Fa Hein Cave, Sri Lanka. In *the South Asian Archaeology* (ed.) R All chin, B All chin, the Ancient India and Iran Trust, Cambridge, UK 839-853
- Kete, K., (1994). *The beast in the boudoir; petkeeping in the 17<sup>th</sup> century*. Paris, Berkeley; University of California.
- Larson, G., and Karlsoon (2012). Rethinking dog domestication by integrating genetics, archaeology, and biography. *Proceedings of the National Academy of Science of the United States of America*, 109( 28), 8878-8883.
- Larson, G., & Burger, J., (2013). A population Genetics of animal Domestication. *Trends in Genetics*, 29 (4): 197-206.
- Lemish, M, (1996). *Werdoi; Canines in Combet*. Washington; Berssey's
- Marvin., & Susan, M.C., (2010). In it together, an introduction to Human-Animal Studies. *The Routledge Handbook of Human-Animal Studies*. Eds. Garry Marvin and Susan Mc High London. Routledge is forthcoming.
- Miklosi, A. (2007). *Dog behavior, Evolution and Cognition*. Oxford unit press, New York.
- Motari L., and Goodwin D. (2007). A Survey of behavior characteristics of pure-breed dogs in Italy. *Appl. AnimBehav. Sci*, 103, 118-130.
- Olugasa B.O, Aiyedun J.O. and Akingbogun A.A., (2009). Identification of geographical risk factors associated with clinical human rabies in a transit city of Nigeria. *Epizootiology and Animal Health in West Africa*, 5: 43-52.
- Olutayo A.O., (2018). *Sabiticate is equal to what?* An inaugural lecture delivered at the University of Ibadan. Ibadan University press publishing House, Ibadan.
- Popper, K., ([1959] 1980). *The Logic of Scientific Discovery*.
- Pratik C., (2010). Beasts of burden: Animal and Laboratory Research in colonial India. University of Kent, published in Final Edited form as HistSci 2010 June 1; 48 (2) 125-152 of the socio-political construction of southern African Dog



- 'BREEDS' as a window on social history. University of Stellenbosch, South Africa.
- Saheed A., (2018). Empire Day in Africa: patriotic colonial childhood, imperial spectacle and nationalism in Nigeria, 1905-60. *The journal of imperial and commonwealth history*.
- Sandra, S., (2003). Dogs and Dogma; A discussion of the socio-political construction of southern African dog 'breeds' as a window on social history. *The University of Stellenbosch, South African Historical Journal*, 48 190-206.
- Shakespeare, A., S., (1995). The incidence of Canine babesiosis amongst sick dogs was presented to the Onderstepoort Veterinary Academic Hospital. *J.S Afri Vet Assoc*, 66 (4) 247-250.
- Svartberg, K., (2006). Breed-typical behavior in dogs historical remnants or recent constructs? *Appl. AnimBehav. Sci*, 96, 293-313.
- Swart, S. (2019). Animals in Africa History. In Oxford Research Encyclopaedia of African History, Thomas Spear (ed).
- Thorpe V.S., & Cargill J., (1998). Gerome project Maps out Dogs Genetic Future. *Dogworld*, 83, (6), 20-24.