

# Cultural-beliefs' influence on students' learning of livestock production in Ogun State, Nigeria

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### **Abstract**

The culture of students often influences how agricultural topics are learned. This study examined the impact of cultural beliefs senior secondary school agriculture students held on their livestock production learning in Ogun State, Nigeria. The study employed a survey research design guided by four research objectives. The population consisted of all senior secondary school agriculture students in Ogun State, and a multi-stage sampling technique was used to select participants. Data were collected using a researcher-designed questionnaire and analysed using mean and standard deviation. The findings revealed that parents, peers, and traditional religious leaders are the primary sources of students' cultural beliefs. These beliefs, often expressed as taboos, rituals, and superstitions, significantly influence students' learning of livestock production. To address this, sensitising teachers about the interaction between cultural beliefs and the teaching of scientific principles is recommended.

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1

# INTRODUCTION

Agriculture has been a cultural activity practised in Africa from time immemorial. Most modern towns and cities can trace their history or settlements in their current location to search for good arable land (National Geographic Societies, 2023). Thus, agriculture has been part and parcel of the African cultural heritage, especially in West African nations. In Nigeria specifically, agriculture was the major economic activity before the advent of the colonial masters (Said & Singla, 2021). It is the traditional economic activities around which other cultural activities revolve. For instance, in many communities, their festivals revolve around the operations and seasons of farming. For example, the new yam festival is timed to coincide with harvest time; masquerades are done when there are fewer farm activities. Most traditional religious practices are tied to their farming practices, thus showing the extent to which farming was an intricate part of Nigerian traditional life before the advent of colonialism.

Until now, agriculture is still the main economic activity of more than seventy percent of the Nigerian populace and still contributes a substantial amount to GDP, up 23% in 2022 (*News Agency of Nigeria*, 2022). This indicates the extent to which agriculture or farming has been entrenched into the life and history of most communities and tribes in Nigeria. Agricultural or farming practices are usually part of the heritage handed down from generation to generation in Yoruba land. The Yoruba people of Nigeria's cultural history can never be complete without their cultural practices in agriculture. Hence, there is a knot between farming and culture in Yoruba land.

According to Stephenson (2023), culture can be defined as the pattern of historically transmitted meanings, including the norms, values, beliefs, ceremonies, traditions and myths in varying degrees as understood by community members. Culture is not genetically inherited and

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cannot exist on its own; instead, it is always shared by members of a society (Chris, Gouher, Saad, & Marcelle, 2016). Culture is an essential feature of a society that differentiates it from another cultural group. Culture shapes how people think, feel, and act, even in schools. Culture focuses more on the core values necessary to integrate and influence young minds (Mugambi, 2022). The fundamental elements of all cultures are language, values, customs, laws, artefacts or products, rituals, and myths. These are transmitted as cultural beliefs from generation to generation (Lamb, Hair & Daniel, 2011).

Therefore, cultural beliefs are complex webs of traditions and rituals built over time as parents and children work together and deal with crises and accomplishments. Ngowari, Ngwu, and Ogbanga (2020) assert that a community's cultural belief is a complex pattern of practices deeply ingrained in the very core of the community. Cultural belief is the salient stream of traditions, values, rituals and norms developed over time as people interact, confront challenges and solve problems.

Cultural beliefs influence or shape what the child holds to be accurate, acceptable and valuable. That is, cultural beliefs serve as a screen that filters the future knowledge acquisition of a child. Cultural belief influences everything in schools: how staff dress, what they talk about, their willingness to change, the practice of instruction, and the emphasis given to students and school learning (Deal & Peterson, 2016). The school's system and knowledge that is acquired within the school are built on tested and verified principles.

However, the learners that come to school hold some cultural beliefs that shape how they imbibe that knowledge, especially in subjects with social or cultural affiliations. For instance, students may accept what they are being taught in physics and chemistry hook and sinker without raising any doubt about what they are being taught. This could happen because most concepts and terminologies are foreign to them and have no relationship with their culture. Meanwhile, in subjects like agriculture, home economics and social studies, in which they have had practical experience in their community, there are instances where their prior beliefs about what they have known in such subjects will come into play. This is especially so in science subjects.

Science relies on rational methods to explain events, focusing on cause-and-effect relationships verified through experiments and governed by scientific laws. Agricultural science, taught in schools, is based on these principles, while rural agricultural practices often stem from traditional beliefs passed down through generations. This conflicts between community knowledge and scientific education (official knowledge). Unaddressed cultural beliefs can interfere with students' understanding of science, leading to misconceptions that hinder their academic performance. Therefore, teachers must clarify distinctions between traditional and scientific approaches to avoid these issues. According to the potential problems and previous discussion, this study investigates the cultural beliefs among students, their origins, senior students' perceptions, and their impact on teaching and learning, particularly in livestock production. The lack of previous studies on this topic requires more attention. This study will contribute to the existing theoretical discourse on students' cultural beliefs and technically propose suggestions to overcome the problems among students with various cultural beliefs.

# LITERATURE REVIEW

Much ethno-ecological research has revealed that farmers from different cultures have varying perceptions of the natural world. This includes the structure and functioning of their agricultural ecosystems (Timsuksai & Rambo, 2016). Based on long-term trial and error experimentation by farmers, different ethnic groups have evolved distinctive cultural models of appropriate agroecosystem structures. These cultural models help guide farmers' management decisions and interactions with the soil, water, plants and animals that comprise their agroecosystems. These various cultural models and beliefs that farmers have developed over the years are not limited to one area of agriculture but to crop and livestock farming.



Livestock is all domesticated animals, mainly sheep, goats, cattle, and pigs, intentionally reared in an agricultural setting for food, fibre, or breeding purposes (Ntshepe, 2011). Livestock production deals with the breeding and caring of animals for specific purposes, such as for their meat, milk and/or fur. Under this branch is cattle production, piggery production and poultry production (Solomon, 2013). Every form of livestock farming is important in most countries' agricultural sectors. Livestock supplies high-quality foods from animal sources and has several associated social and economic benefits to people worldwide (Capper, 2013). Banda and Musonda (2018) believe that livestock farming is important in helping households cope with adverse shocks. This is because livestock provides farmers with income source diversification, as farmers can sell their livestock to obtain cash. Livestock production is important to food security for many farmers. Livestock farming has great potential to alleviate household food insecurity and poverty in communal areas worldwide. Livestock may be insurance against crop loss in poor weather (Godde *et al.*, 2021).

Livestock production contributes to food security directly and indirectly and plays a crucial role in the livelihoods of almost one billion of the world's poorest people (Smith *et al.*, 2013). Important products and by-products derived from livestock farming include meat, milk, eggs, manure, feathers, hides and skins, fibre and wool. Livestock keeping is a potent risk-reduction strategy for vulnerable communities, and livestock are important providers of nutrients and traction for growing crops in smallholder systems (Herrero *et al.*, 2023). According to Pfeifer (2020), keeping livestock is an escape from poverty for poor rural farmers. It is also a strategy for spreading risks and increasing rural farmers' resilience and assets. It further serves to cope with market diseases and climate shocks, especially in developing countries.

In developed countries, livestock production is highly effective. This is due to the efficient use of limited resources, especially land. Land is better utilised with more attention given to animal ethics, environmental impact, product traceability and consumer satisfaction through science and technology (Satyanarayana & Risheen, 2023). However, instead of raising livestock in line with modern principles in African societies, various socio-cultural factors, religious beliefs, taboos and norms regulate animal consumption and utilisation (Mammo, 2023). These taboos, myths and norms are religiously followed, and non-compliance with these widely believed taboos attracts public outcry and punishment for erring members of the community in some cases. In addition, Kotler and Armstrong (2013) remarked that people hold some values and beliefs that sometimes resist change in some specific aspect of society. Examples of such aspects include marketing, marriage, dressing, and farming.

Culture, sub-culture and social class are known to influence buying behaviour significantly. Mkik and Mkik (2020) noted that culture is the most fundamental determinant of a person's wants and behaviour. Among the instruments that culture uses to achieve this are taboos and superstition. A taboo is a cultural or religious custom that forbids one to do, touch, use or talk about a particular thing (Hong, 2024). Taboos are unwritten social laws that govern human behaviour and attendant constraints that regulate human social life and directly affect the management of many constituents of the local resources (Landim, de Menezes, Dos-Santos, de Freitas, da Silva, & Ferreira, 2023), including livestock.

Different forms of superstitions, taboos, stigmas, myths, and personal dislikes exist that significantly influence the husbandry, marketing, consumption, and improvement of livestock in Nigeria. Many of such taboos have rendered some poultry birds mystical. Ola, Afisinlu and Olatunde (2003) asserted that the duck is the most venerated domesticated bird in Nigeria and that its potential has remained unutilised due to many supernatural taboos and myths associated with it among Yoruba-speaking people of southwest Nigeria. Other poultry and livestock species, such as chicken, goat and sheep (Aina *et al.*, 2009) and snails (Oyebanji, 1999; Lawal, 2003), also suffer one form of discrimination or the other in Nigeria but not as pronounced for duck. There is also a superstition of young people and duck rearing.

The scientific analysis of this taboo revealed that it originated from the superstition attached to the sluggish nature of the ducks. Since Muscovy ducks are slow-moving birds, this was superstitiously interpreted that if a young person rears a duck, the progress/success of such youth will be delayed or retarded because ducks are sluggish and slow-moving. This taboo is one of the underlying factors responsible for the low involvement of youths in duck production in Nigeria in general. This assertion was reinforced by studies conducted in Nigeria, which found that duck rearing is dominated by elderly people (Alfred & Agbede, 2012; Oguntunji, 2013).

In Nigeria, in the mid-west state in particular, children are seldom given meat and eggs by their parents due to the belief that it will predispose them to stealing. Also, only adults take gizzards and thighs of ducks, while children only have access to the lower legs or sometimes the head. Similarly, children are forbidden from taking coconut milk and liver because of the belief that the milk renders them unintelligent, while abscesses are caused in their lungs by the liver. Also, in some religions, an animal that has died naturally is considered unfit for consumption. Another superstition is that goats with red cloth tied around their neck are believed to have been used for sacrifice; it is terrible to walk between female sheep (ewe); when pheasant lay eggs, humans must not see it, or it loses its fertility. All these are associated cultural beliefs which govern people's perception of most livestock, birds, and animals. Thus, all these beliefs and many others could significantly influence people's perception of these animals, their production, and their attitude to learning about them. Since beliefs are passed down from adults to their children, this study seeks to examine the influence on students learning about livestock production.

In addition, the development of agriculture in recent decades has been shaped worldwide by modernisation measures. Mechanisation and intensification of production, rationalisation of farm management, and adaptation to urban-industrial lifestyles were the goals of modernisation pursued by the various disciplines of agricultural science. While achieving this, little attention has been paid to farm people's culture, which was usually regarded as outmoded and the remnant of a tradition that disrupted the modernisation process. Although rural sociology aims to overcome and exclude such 'backward' cultural manifestations (Jaffe & Gertler, 2017), these cultural issues still influence agricultural teaching, learning, and production.

Given the importance of livestock production to the country's nutrition and food sustainability, it is worth noting that there is still some distrust about livestock production in some parts of Nigeria. This is due to various cultural beliefs, which include myths, taboos, and superstitions. This has made teaching and learning about agriculture difficult. These cultural beliefs, which are being acquired informally (i.e. from their parents) by students, could create doubts in the minds of learners and, in turn, result in a lack of motivation to learn about livestock farming in their various schools and, consequently, poor performance. This could result in a lack of willingness to engage in livestock farming in the study area. Therefore, this situation called for this study to ascertain the existing cultural beliefs that might influence the teaching and learning of animal production in secondary schools in the study area to demystify some of these beliefs for the smooth inculcation of scientific agricultural contents.

In recognition of the influence and effects that culture could have on agricultural practices and learning, different scholars have studied the effects of culture and cultural values on agriculture and education. Onyemaechii & Boh (2024) explored the cultural influences on curriculum and education reforms: lessons for Nigeria's future. They traced the intersection of cultural influences and education reforms, focusing on how cultural factors shape education policies and practices in Nigeria. Ullah *et al.* (2024) worked on unveiling misconceptions among small-scale farmers regarding Ticks and Tick-Borne Diseases (TBDs) in Balochistan, Pakistan. The study surveyed farmers of grazing animals in seven districts to access their knowledge, attitudes, and practices regarding ticks and TBDs.

The study found that some cultural beliefs regarding security, achievement, and power shaped their responses. Tanko and Ismaila (2021) also found out how culture and religion influence



the agriculture technology gap in Northern Ghana. The study discovered that culture and religion influence the gap in technology and the adoption of innovative practices in the study area. Mburu *et al.* (2021) examined the lay attitudes and misconceptions and their implications for the control of brucellosis in an agro-pastoral community in Kilombero district, Tanzania. The study examined the cultural attitudes associated with knowledge of brucellosis, food consumption and animal husbandry behaviour risking transmission of this disease. This agro-pastoralist community found that it holds on to long-held beliefs and practices and lacks understanding of the biomedical concept of brucellosis. These studies showed that culture and traditional beliefs shaped education and agriculture practices.

Furthermore, Zoma Traoré *et al.* (2021) studied values and beliefs that shape cattle breeding in Southwestern Burkina Faso. The study sought to understand the producers' beliefs and values that shape their cattle breeding programme. Hidano, Gates, and Enticott (2019) studied farmers' decision-making on livestock trading practices: cowshed culture and behavioural triggers among New Zealand dairy farmers. The study discovered that farmers' livestock purchasing behaviour evolves with culture under a given farm environment. Ejembi and Obekpa (2017) studied the effects of socio-cultural factors on effective agricultural training programs for farmers by the Benue State Agricultural Development Authority in Zone C. The authors remarked that most agricultural innovations were not sustainably adopted due to incompatibility with social and cultural practices. It was found that farmers who have strong cultural beliefs were responsible for non-participation in the training program.

These studies buttress the influence of culture on learning about agriculture. Similarly, Muge and Nkurumwa (2017) researched the effects of culture on the learning styles of secondary school agriculture students in Uasin Gishu County, Kenya. They believed that culture and learning are connected in important ways. They asserted that early life experiences and the person's cultural values affect both the expectations and learning processes. The author found that people from different cultural traditions may have an approach to education that differs from the schools. The authors held that there is a relationship between culture and learning style. They concluded that teachers need to ensure that they incorporate methods of teaching in their classrooms that accommodate various cultural notions students bring to school and that intentionally applying diverse teaching strategies is the only way to meet the learning needs of culturally diverse students.

The various studies examined have established the effects of culture on both the practice and learning of agriculture. This influence exists regardless of whether it is under a formal or non-formal education system, as found in the extension programmes. However, none of these studies have identified the cultural beliefs held by the people concerned to discover how they conflict with their adoption practices or learning. Given this, there is a need to identify the actual cultural beliefs that shape students' or farmers' knowledge and attitudes towards the learning of agriculture. This will help to differentiate between potentially harmful cultural beliefs from unharmful ones. It will, in turn, help the teacher to identify where those cultural beliefs conflict with scientific beliefs and how they interfere with student learning. Hence, this study sought to fill the gap that would benefit agriculture's teaching and learning.

Identifying cultural beliefs that agricultural students hold about livestock production is immensely beneficial to teaching and learning about Agriculture. The study's outcome could help the teachers understand how the students view livestock production lessons. This will also enable the teachers to have a clear conception of what students hold about a particular livestock and assist the teachers in understanding the likely attitude that students exhibit about a particular topic in livestock production. It will also help the teachers to understand the cultural context from which the student emanated and thereby tailor their teaching to diffuse incorrect beliefs. In contrast, the learner's correct beliefs are reinforced. A good understanding of the student's cultural beliefs could also assist the curriculum planners in suggesting the right livestock animal

as instructional resources for each culture. Hence, the study could contribute to agricultural education, curriculum planning, and students' subsequent academic performance. Hence, this study examines the influence of senior school agriculture students' cultural beliefs on learning about Ogun state livestock production.

#### **METHOD**

The study adopted a survey design of the descriptive research type. The descriptive survey method is used in preliminary and exploratory studies to allow the researcher to gather information, summarise, present, and interpret for clarification. This research type was considered appropriate for this study because it allowed the researcher to collect personal and general information to explain the influence of cultural beliefs held by senior school Agriculture students on learning livestock production in Ogun state, Nigeria.

The population of this study was all senior secondary school students in Ogun state, Nigeria. A multi-stage sampling technique was adopted for the study. The first stage randomly selects three local governments (Ijebu North-east, Ijebu-east, and Odeda) out of 20 local government areas from the state. The second stage involves stratification of schools in the local governments into two groups (i.e. Private schools and public schools). In each group, simple random sampling was adopted to pick two from each group (i.e. two privately owned secondary schools and two government-owned secondary schools) in each local government area. Thus, 12 (6 private and six public) secondary schools were selected from each LGA. Lastly, a simple random sampling method was used to select 100 respondents from the four selected secondary schools in each Local Government Area of Ogun State and 25 respondents from each selected secondary school in each Government Area of Ogun State. Thus, the total sample was 300 respondents from three local governments.

The instrument used for this study was a researcher-designed Questionnaire consisting of structured items developed from the literature. The Instrument was tagged 'Influence of Cultural Beliefs Held by Senior School Agriculture Students on the Learning of Livestock Production in Ogun State Questionnaire'. The questionnaire is comprised of two parts, I and II. Part I focused on demographic information of the respondents based on variables such as sex, age, religion, and nature of school. Part "II" consists of items subdivided into sections A-D based on the research questions. The four-point rating scale with alternatives of Strongly Agree (SA) = 4 points, agree (A) = 3 points, disagree (D) = 2 points and Strongly Disagree (SD) = 1 point was used.

The validity of an instrument is the degree to which it measures the variables it claims to measure. In order to ensure the validity of the instrument, copies of the questionnaire were given to experts in the field of agriculture at the University of Ilorin to carry out the instrument's face and content validity. Comments and suggestions made by the experts were carefully studied and used to improve the quality of the instrument for final administration to the respondents. All necessary ethical issues were taken care of in administering the instrument. The researcher worked with three trained assistants in the administration of the instrument. The questionnaire was administered to each respondent in their respective schools and was collected immediately to avoid loss of the instrument. The completed copies of the questionnaire for this study were collected, sorted, coded and subjected to appropriate statistical analysis. Descriptive statistics of frequency and percentage were used to present the demographic information, while mean and standard deviation were used to answer the stated research question.

# **RESULT AND DISCUSSION**

This section will present the results of the surveys and end with a discussion related to the findings. Four main purposes of the study will be presented: the various cultural beliefs of senior students, the sources of their beliefs, how they perceive these cultural beliefs and their influences



or impact on learning and teaching practices.

# A. Cultural beliefs on livestock beld by agriculture students

**Research Question 1:** What are the various cultural beliefs held by senior school agriculture students in Ogun state regarding livestock?

Table 1 explains the various cultural beliefs on livestock held by senior school agriculture students in Ogun state. The table revealed that all the statements on the table, except item 4, are the cultural beliefs held by senior secondary school students in Ogun state. This is shown by their mean responses, above the 2.50 benchmark.

The study revealed that the students in the study area held many cultural beliefs on lives-tock production. Some of such beliefs include: snail fluids lead to hunching back when it touches a person's back; touching duck's eggs with bare hands leads to leprosy; a rolled piece of cloth being put on a goat's ear prevents it from standing up; picking snail in the morning or the dream leads to misfortune; it is terrible to walk through the middle of female ewe; when a person rears duck, it is believed that such a person will have delayed success; Birds are not to be fed at night; Cowries should be placed in duck's mouth after killing them so that one that killed the duck would not die among others.

These findings indicate many myths, superstitions, and cultural beliefs regarding animal production in the study area, passed on to the current generation of young people in senior secondary schools. These findings agree with Jeffers and Lillis (2021), who define cultural beliefs as complex webs of traditions and rituals built over time as people work together, solve problems, and confront challenges.

**Table 1** Frequency, mean and standard deviation on cultural beliefs on livestock held by agriculture students in Ogun state

| S/N | Cultural Beliefs on Livestock Held by Agriculture Students   | Mean | SD   | Remark   |
|-----|--|------|------|----------|
| 1   | Birds are not to be fed at night   | 2.69 | 0.93 | Believed |
| 2   | Snail fluids lead to hunchback when it touches a person's back   | 2.87 | 0.84 | Believed |
| 3   | Cowries should be placed in the duck's mouth after killing them so that the one that killed the duck would not die | 2.86 | 1.06 | Believed |
| 4   | A hen will not go back to its egg after a man has touched it   | 2.43 | 0.93 | Not      |
| 5   | Touching a duck's egg with bare hands leads to leprosy   | 3.03 | 0.77 | Believed |
| 6   | Picking a snail in the morning or dreams leads to misfortune   | 3.05 | 0.85 | Believed |
| 7   | Snail eggs cannot hatch until a thunder strike   | 2.95 | 0.98 | Believed |
| 8   | Goats with red cloth tied around their neck are believed to have been used for sacrifice                           | 2.91 | 1.02 | Believed |
| 9   | It is terrible to walk through the middle of a female ewe  | 2.58 | 0.79 | Believed |
| 10  | While de-feathering birds, taking is not allowed because its feathers grow back                                    | 2.94 | 1.04 | Believed |
| 11  | A rolled piece of cloth being put on a goat's ear prevents it from standing up                                     | 2.67 | 0.99 | Believed |
| 12  | Putting salt in a goat's mouth prevents it from making sound   | 2.61 | 0.94 | Believed |
| 13  | When a pheasant lays an egg, a human must not see it, or it loses its fertility                                    | 3.08 | 0.84 | Believed |
| 14  | When a young person rears duck, it is believed that such a person will have delayed success                        | 3.05 | 0.89 | Believed |

Source: field survey

*Acceptable Mean* ≥ 2.95 = *Agreed, Mean*<2.95 = *Disagreed* 

# B. Sources of cultural beliefs held by students

**Research Question 2:** What are the sources of cultural beliefs in agriculture in Ogun state?

Table 2 explains the sources of the cultural beliefs held by students in Ogun State. The table revealed that all the listed sources are the sources through which students obtain cultural beliefs. This is because the mean value for all the sources is above the 2.50 cut-off mark for agreement. Also, all the standard deviation values, close to one, show less variability in their responses.

Further findings from the study revealed that students gather these beliefs from different sources. These sources include parents, religious leaders, adults in the community, traditions of the land, and peer groups. This shows that these cultural beliefs are obtained from adults and the community, not the school system. This aligns with the submissions of Ruby and Meiying (2023), who explained that students are close to their parents in the early stages of life. They tend to believe all their parents are telling them because they believe their parents know all. Also, as these children mix with their peers, information passed from these parents is being shared, so the trend continues.

Table 2 Frequency, mean and standard deviation on sources of cultural beliefs held by students

| S/N | Sources of Cultural Beliefs Held by Students           | Mean | SD   | Remark |
|-----|--|------|------|--------|
| 1   | I get these beliefs from Parents                       | 2.99 | 1.03 | Agreed |
| 2   | I get these beliefs from traditional religious leaders | 2.97 | 0.94 | Agreed |
| 3   | I get these beliefs from adults in the community       | 2.87 | 0.89 | Agreed |
| 4   | I get these beliefs from the tradition of the land     | 2.86 | 0.93 | Agreed |
| 5   | I get these beliefs from Peer groups                   | 2.82 | 0.96 | Agreed |

Source: field survey

Acceptable Mean ≥ 2.50 = Agreed, Mean<2.50 = Disagreed

# C. Perception or attitudes of atudents to the cultural beliefs on livestock production

**Research Question 3:** What are the perceptions or attitudes of senior school students to these cultural beliefs in Ogun state?

Table 3 explains the perception or attitude of students to the cultural beliefs on livestock production in Ogun State. From the table, it is revealed that students hold this belief with great interest (2.62); they perceive this cultural belief as taboos (2.73), and students hold the cultural beliefs as rituals (2.68). Indicating that they believe strongly in them. While on the other hand, they disagreed that they are mere stories (2.23) or superstitions (2.21). The above shows that students hold those cultural beliefs tenaciously

**Table 3** Frequency, mean and standard deviation on perception or attitudes of students to the cultural beliefs on livestock production in Ogun state

| S/N | ITEMS  | Mean | SD   | Remark   |
|-----|--|------|------|----------|
| 1   | Students perceive this cultural belief as mere stories | 2.23 | 1.89 | Disagree |
| 2   | Students hold this belief with great interest          | 2.62 | 1.76 | Agree    |
| 3   | Students perceive this cultural belief as taboo        | 2.73 | 1.77 | Agree    |
| 4   | Students perceive this cultural belief as rituals      | 2.68 | 1.76 | Agree    |
| 5   | Students perceive this belief as superstition          | 2.21 | 0.92 | Disagree |

Source: field survey; *Acceptable Mean* ≥ 2.50 = *Agreed, Mean*<2.50 = *Disagreed* 

The findings revealed that students' perception or attitude to these cultural beliefs is that they strongly believe in them. They perceived them as taboos or something they must not ques-



tion; they also hold this belief with great interest and as rituals. The way the students hold these beliefs indicates that they strongly believe in them, as they do not see them as mere superstitions or ordinary stories. Abdessallam, Ghouati, and Nakkam (2020) noted that people behave in conformity with the cultural norms and beliefs of the society in which they live. Hence, most students in the study area hold cultural beliefs about livestock production.

# D. Influence of cultural beliefs on bearning of livestock

**Research Question 4:** How do these cultural beliefs influence teaching and learning livestock production in Ogun State?

Table 4 presents the influences of cultural beliefs on learning livestock production in Ogun State. The table revealed that students agreed with all the statements about the influence of cultural beliefs on student learning of livestock production. Their responses show that cultural beliefs negatively influence their learning of livestock production, with mean values ranging from 2.67 to 2.75. The only exception is that it does not affect their consumption of animal products (2.42).

The study finally discovers that the cultural beliefs held by students influence their learning of animal production but not that of its consumption. The responses from the research show that students find it challenging to accept all the scientific principles about livestock production due to their cultural beliefs. Cultural beliefs hinder students' scientific reasoning towards agriculture as a subject. Also, it was revealed in these studies that cultural beliefs make students unwilling to study animal production. Hence, cultural beliefs influence students learning of agriculture.

Wang, Guo and Degol (2019) support the hypothesis that cultural beliefs influence students' achievement goals, which subsequently influence students learning strategies and their academic achievement. Abdessallam, Ghouati, and Nakkam (2020) remarked that culture considerably influences how people think, perceive, act and communicate; this consequently influences how teachers teach and how students learn. This implies that the culture the learners have imbibed from their community often influences what they learn in the school, which the teachers may not take cognisance of at times.

**Table 4** Frequency, mean and standard deviation on the influence of cultural beliefs on the learning of livestock

| S/N | Influence of Cultural Beliefs on the Learning of Livestock   | Mean | SD   | Remark |
|-----|--|------|------|--------|
| 1   | These cultural beliefs negatively influence students' love for learning about livestock                            | 2.73 | 0.98 | Agree  |
| 2   | These beliefs create fear in the students, and they do not want to consume its produce                             | 2.42 | 1.03 |        |
| 3   | These beliefs make it difficult for me to accept some scientific principles about agriculture science as a subject | 2.75 | 0.99 | Agree  |
| 4   | These cultural beliefs raise some doubts about some things they teach me about livestock production in school      | 2.67 | 0.98 | Agree  |
| 5   | With these beliefs, I am hesitant to study livestock production  | 2.68 | 1.02 | Agree  |

Source: field survey

Acceptable Mean ≥ 2.50 = Agreed, Mean<2.50 = Disagreed

The study findings have implications for curriculum planning practice in that a thorough understanding of the beliefs that students hold about a particular livestock could help shape the content of the curriculum in a multicultural country like Nigeria. The idea of a one-size-fits-all approach may not be adopted when suggesting instructional resources or livestock for skill acquisition in livestock production. Understanding different cultures' beliefs about different livestock could help suggest the right animal for each culture. In addition, the curriculum planner, having

firsthand information about the different beliefs that each culture has about different livestock, could use the curriculum to dispel the wrong and harmful beliefs. In contrast, the right ones could be reinforced or propagated using the same curriculum.

#### CONCLUSION

Cultural beliefs are fundamental and exist in society. Most people, students, still practice them and believe in them. This is because they have grown up seeing their parents and religious leaders practice them and believe that if it works for their leaders, it will work for them. There are hidden meanings attached to these beliefs that one may not understand unless one lives in the society that practices them. Hence, agricultural curriculum planners have a role in understanding the cultural beliefs of their society to fashion an appropriate curriculum that aligns with their healthy beliefs. As a result of such cultural beliefs, students tend to possess negative attitudes toward livestock production. Such cultural taboos, rituals, and superstitions hinder students from scientific reasoning and kill their curiosity about agriculture, creating poor attitudes toward learning livestock production, agriculture in general, and other science topics with cultural inclinations.

Based on the study's findings, it is recommended to: 1) conduct enlightenment programs for teachers, students, and the community to address the interplay between cultural beliefs and scientific knowledge, highlighting its impact on curriculum implementation; 2) organise orientations and seminars to help teachers and students differentiate between beneficial and harmful cultural beliefs; 3) sensitise students to the adverse effects of certain beliefs on scientific reasoning and curriculum mastery; and 4) ensure science teachers understand students' cultural orientations when implementing the curriculum. Curriculum planners should develop strategies to dispel harmful beliefs, address misconceptions about livestock production, and introduce students to modern agricultural practices to bridge knowledge gaps.

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