

Identification of Biology-Related Superstitious Beliefs Prevalent in Traditional Societies: A Case Study of Isin Local Government Area, Kwara State, Nigeria

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Abstract - The purpose of this study is to identify prevalent biology-related superstitious beliefs. The study was carried out in five of the eleven wards in Isin Local Government Area, Kwara State, Nigeria. A purposive sample of two hundred and fifty people was asked to mention the biology-related superstitious beliefs, which they held in twelve areas, namely: nutrition, menstruation, barrenness, pregnancy, birth, heredity, family planning, growth, diseases, health, animal and water. Their responses, which were tape-recorded as well as hand written in prepared sheet, showed that the respondents mentioned 2658 superstitious beliefs in all including repetitions. Out of the number, 190 different superstitious beliefs were identified.

A total of 77 superstitious beliefs were mentioned by 40% of the two hundred and fifty respondents. These were regarded as the prevalent superstitious beliefs which meant that only 41% of the 190 different superstitious beliefs were prevalent. Women held more superstitious beliefs than men and older adults held more superstitious beliefs than younger adults. Moreover, uneducated respondents held more superstitious beliefs than the educated; and Muslims mentioned more superstitious beliefs than Christians. Even though many of superstitious beliefs are false and absurd, people still hold them probably because doing so met their personal and social needs. Traditional beliefs are discovered to have arisen out of the African view of nature, which is monistic in contradiction to the modern scientific view, which is dualistic. The monistic view sees both animate and inanimate objects as one, interpenetrating each other.

Keywords: Identification, Superstitious beliefs, Prevalent, Traditional societies

Introduction

Biology is the study of living things, their environment and their interactions (Raven & Johnson, 1989; Raven and Johnson, 1991; and Gottfried, 1994) human share the characteristics of living things (such as nutrition, reproduction and growth), but differ from other living things in their level of intelligence and development of culture. Culture is a board term and refers to the total way of life of a people – their values, beliefs, artifacts, laws, morals, economic and social institutions (Ayisi, 1980:1). The study of cultures is the domain of anthropology and sociology; not biology (Gottfried, 1994:15). However, the study of human beings within the context of all living things cannot separate itself from the study of how culture affects human interactions with the rest of the living world. Therefore, identification of superstitious beliefs of people in Isin Local Government Area (LGA) which are related to aspects of biology is a valid exercise.

Biology is one of the sciences. The products of science are scientific facts, concepts, laws and theories. It is through the use of the products of science that regularities in nature are described, explained, and predicted (Ogunniyi, 1986), superstitious beliefs come under the products of science. Africans of old, were concerned with the nature of matter, the general principles governing the universe and the regularity of cause and effect, relationships in nature,

the problem of change and stability in nature. This is why they had designed frameworks often called African science or African world view.

African science is a concoction of rudimentary, empirical science, alchemy, animism and magic (Ogunniyi, 1986). African science has evolved from beliefs, metaphysics, parapsychology, astrology, cosmology of the then known world and it is still a strong force (Talmont – Kaminiski 2008).

The Problem

It is against this background that one can talk about biology-related superstitious beliefs. Some of the beliefs are associated with biological facts and concepts, if not laws and theories (Olawepo, 2011). Biology-related Superstitious beliefs are about the objects, events and processes of biology this study was done in order to identify the biology-related superstitious beliefs prevalent among adults in Isin Local Government Area (LGA) of Kwara State, Nigeria.

The following research questions were formulated for the purpose of the research:

1. What are the types of biology-related superstitious beliefs prevalent among the people of Isin LGA?
2. Are the prevalent biology-related superstitious beliefs held by Christians different from those held by Muslims?
3. Are there differences in the biology-related superstitious beliefs prevalent among men and women?
4. Do young adults hold different prevalent biology-related superstitious beliefs from those held by older adults?
5. Do those having formal education differ from those without it on this type of prevalent biology-related superstitious beliefs held by them?

Methodology

The adult population of Isin LGA was estimated by the researcher to be 60% of the total population of 59,738 people (FRN, 2007). The adult population of 35,843 was distributed among eleven wards. A random sample of five wards was taken from these wards, a purposive sample of 250 people was selected.

The researcher categorized biology-related superstitious beliefs into 12 categories, namely: nutrition, menstruation, barrenness, pregnancy, birth, heredity, family planning, growth, animals, diseases, health and water, following the opinions of validators of the instrument. From a pilot study in Edidi ward, which was not among the five wards selected for the main study, the reliability co-efficient of the instrument was 0.84 (Olawepo, 2011).

The researcher and research assistants administered the instrument in a face-to-face discussion/interview in the evenings of Monday, Tuesday, Wednesday, Thursday and Friday for ten days. The language used was English and Yoruba – since the people of the area are Yorubas. The type of superstitious beliefs mentioned by respondents was both written and tape-recorded as a backup under each of the twelve categories of biology concepts. Data were analyzed using frequency counts, percentage points, and chi-square-(χ^2) statistic. The chi-square analysis was done in order to find out the influence of sex, age, religion and formal education on the types of superstitious beliefs mentioned (held) by the 250 respondents.

Data Analysis and Results

Research Question One

The first research question which asks for the type of biology-related superstitious beliefs was answered in twelve different ways, corresponding to the twelve concepts into which the superstitious beliefs have been categorized. Therefore, the analysis began with nutrition as category I and ended with water as category 12.

Biology-related superstitious beliefs were mentioned 2658 times in all by the 250 respondents. However, the number of different superstitious beliefs mentioned was 190, because a superstitious belief could be mentioned many times. The 190 different superstitious beliefs were distributed among the 12 concepts as follows: Nutrition (27 beliefs), menstruation (14), Barrenness (8), Pregnancy (21), birth (18), heredity (4), family planning (10), growth (17), animals (35), diseases (16), health (10) and water (9).

Those superstitious beliefs that were regarded as prevalent superstitious beliefs by the researcher. From the 190 distinct superstitious beliefs, the following were the number of prevalent (widely-held) superstitious beliefs per category:

- | | | | |
|---------------------|---------|-----------|---------------|
| (1) Nutrition | -----12 | prevalent | superstitious |
| beliefs | | | |
| (2) Menstruation | -----6 | prevalent | superstitious |
| beliefs | | | |
| (3) Barrenness | -----4 | prevalent | superstitious |
| beliefs | | | |
| (4) Pregnancy | -----9 | prevalent | superstitious |
| beliefs | | | |
| (5) Birth | -----5 | prevalent | superstitious |
| beliefs | | | |
| (6) Heredity | -----4 | prevalent | superstitious |
| beliefs | | | |
| (7) Family planning | -----7 | prevalent | superstitious |
| beliefs | | | |
| (8) Growth | -----4 | prevalent | superstitious |
| beliefs | | | |
| (9) Animals | -----14 | prevalent | superstitious |
| beliefs | | | |
| (10) Diseases | -----4 | prevalent | superstitious |
| beliefs | | | |

- (11) Health-----3 prevalent superstitious beliefs
- (12) Water-----5 prevalent superstitious beliefs
- (13) Total-----77 prevalent superstitious beliefs.

Therefore, only 77 superstitious beliefs were prevalent superstitious beliefs. That is, 41% of the 190 distinct superstitious beliefs. Examples of biology-related Superstitious beliefs are:

1. Nutrition – Eating snails by a pregnant woman causes excessive salivation by the newly born child -80%
2. Menstruation – Albinos are the products of sexual intercourse during menstruation period -91%
3. Barrenness (Infertility) – Barrenness or infertility is the work of a household witch- 70%
4. Pregnancy- Everything a pregnant woman eats, the baby inside her eats too- 63%
5. Birth – Giving birth is a dangerous event-94%
6. Heredity- If a pregnant woman steals, her baby will grow up to be a thief-54%
7. Family Planning-A medicated arm band worn by a woman prevents pregnancy -77%
8. Growth- If a farmer kills earthworms; his yam may not germinate in the farm -50%
9. Animals- Animals that eat other animals are possessed by evil spirits – 86%
10. Diseases - If you step on someone's saliva you will have sore throat – 40%
11. Health – Palm wine drives away small pox spirits if sprinkled and cures the disease if taken- 40%
12. Water – Drinking dirty river water cannot harm the drinker or cause his death – 49%.

The prevalent rate among the twelve biology concepts was as follows: nutrition (44%), menstruation (43%) barrenness (50%), pregnancy (43%), birth (28%), Heredity (100%), family planning (70%) growth (24%), animals (24%), diseases (39%), health (25%), water (35%), Nine out of this twelve categories have prevalent rates below 45%. Only three of the concepts carried high prevalent rates.

Research Question Two

The second research question was on the influence of religion. There were 130 Muslims and 120 Christians in the sample. The total number of biology-related superstitious beliefs mentioned by them was 733 and 513 respectively. The calculated χ^2 was 20.3, this is higher than the tabulated χ^2 of 16.98 at 11 degree of freedom and probability level of 0.05. Therefore, the difference in data on frequencies of prevalent superstitious beliefs was statistically significant. Muslims mentioned more prevalent biology-related superstitious beliefs than Christians. Muslims held more superstitious beliefs in eleven categories, while Christians held more in one category namely; menstruation,

Research Question Three

This question was on the influence of sex. There were 103 men and 147 women in the sample. The total number of prevalent superstitious beliefs mentioned by them was 527 and 722 respectively. The calculated χ^2 was 22.34, while the tabulated χ^2 was again 16.98. Therefore, the difference in data was statistically significant. Women held more biology-related superstitious beliefs than men. Women held more superstitious beliefs than men in all the twelve categories.

Research Question Four

This research question was on the influence of age on the types of biology-related superstitious beliefs held by young and older adults. There were 132 young adults and 118 older adults. The numbers of mentioned prevalent superstitious beliefs by the respondents were 547 and 702 respectively. The calculated χ^2 was 26.21. Again the tabulated χ^2 was 16.98. Therefore, the difference in the data on frequencies was statistically significant. Older adults held more superstitious beliefs than the young adults. Older adults held more prevalent superstitious beliefs in nine categories while young adults held more in three categories namely; menstruation, growth and health.

Research Question Five

This question was on the influence of the amount of formal education on the types of biology-related superstitious beliefs. There were 115 uneducated and 135 educated people in the sample. The total frequency of mention of superstitious beliefs by uneducated and educated respondents were respectively 733 and 511. The calculated χ^2 (25.07) was greater than the tabulated χ^2 which is, again, 16.98. Therefore, the difference in the two frequencies was statistically significant. The uneducated held more superstitious beliefs than the educated in all the twelve categories.

Discussion

It has been said above that the average prevalent rate of the twelve categories of biology-related superstitious beliefs was only 41%. Individually, the rate varied from 24% to 43% in nine out of twelve cases. One can be assured that all of twelve categories were highly prevalent in the recent past. The picture today shows that superstitious beliefs are dying out. This finding accords with the view of Atmore and Stacey (1979) than "the past is gradually becoming a lost past" (p.124) in Africa. This is why Ziman (2000) could say that "the most entrenched belief system is vulnerable to external competition" (p.309). In the same vein, Ogunlade (2010) said that there is a gradual process of demythologizing traditional beliefs, taboos and myths. But since the process gradual, one could see record a number of highly prevalent superstitious beliefs on barrenness heredity and family planning.

The influence of sex, religion, age and formal education on the types of prevalent biology- related superstitious beliefs showed the primate influence of education. Women are generally less education than men; older adults too are less educated than young adults; and Muslim are generally less educated than Christians (Oyinloye, 1990; Ogunlana, 1976; Hamed, 2005; Ogunniyi, 1988).

It is not surprising to find in Isin LGA that women held more prevalent superstitious beliefs than men; older adults held more superstitious beliefs than young adults, and must, Muslims mentioned/held more superstitious beliefs than Christians. Through western (formal) education and intermingling of people the traditional societies are losing some of their cultural traits, of which biology- related superstitious beliefs are a part.

Summary and Conclusion

People of Isin Local Government Area have developed some biology-related superstitious beliefs about nutrition, menstruation, barrenness, pregnancy, heredity, birth, family planning, diseases, health, animals and water. These indigenous superstitious beliefs often appear to differ from the modern scientific beliefs. This is because people hold to the monistic world-view that regards all things whether animate and inanimate as one reality. This view is opposed to the scientific view which is dualistic, seeing natural and the spiritual as different. The established belief system tends to discourage awkward frank questions. This is even when social, and cognitive element interest with the beliefs and shows them to be false.

A lot of biology-related superstitious beliefs prevalent among educated men and women, Christians and Muslim, and Young and old are false or absurd. Still these are held by people probably because they minister to their hidden personal needs or their powerful social interests.

Recommendations

The monistic view of the natural world by which African science sees natural and spiritual worlds as one should be replaced with a dualistic world view. This dualistic scientific world view sees the natural world differently from the spiritual world. This way, superstitions, stereotypes and anti-scientific notions are replaced with more objective views about the natural world.

This replacement of the monistic with the dualistic view is being done, especially in schools, but there is still more work to be done, students can verbalize facts, concepts and generalizations in science, but the conceptualization of these are faulty in many cases. Therefore, students should be encouraged to conceptualize in the right direction.

The young learner may still have a cognitive structure that contains knowledge, which is anti-scientific. For example, animism which sees inanimate objects or lower animals as spirits or gods is anti-scientific knowledge. So, they should

be made to reason scientifically. There is evidence that Africa's monistic view of nature has proved to be an impediment to learning science. Teachers must therefore, come to grips with this predicament and work towards its removal.

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