



PERCEIVED INFLUENCE OF INDIGENOUS RELIGIOUS BELIEFS ON ENVIRONMENTAL BEHAVIOUR AMONG HOUSEHOLDS IN OBIO-AKPOR LOCAL GOVERNMENT AREA, RIVERS STATE, NIGERIA

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Abstract

Environmental sustainability within rapidly urbanising socio-ecological contexts requires analytical attention to culturally embedded normative systems that shape behavioural orientations toward ecological stewardship. This study examined the perceived influence of indigenous religious beliefs on environmental behaviour among households in Obio-Akpor Local Government Area, Rivers State, Nigeria. Employing a cross-sectional empirical design integrating quantitative survey methods with qualitative community insights, the study found that indigenous cosmological beliefs and ritual sanctions continue to exert measurable influence on environmental practices such as waste management, sanitation participation, and natural resource conservation. Inferential statistical analysis demonstrated significant associations between indigenous belief adherence and environmentally responsible behaviour. Socio-cultural factors including age, education, and religious affiliation moderated this relationship. The study concludes that indigenous ecological ethics constitute viable complementary frameworks for sustainable environmental governance.

Keywords: Indigenous religion, environmental behaviour, cultural ecology, sustainability, Niger Delta

Introduction

Environmental degradation within the Niger Delta has escalated markedly over recent decades, driven by the convergence of accelerated urbanisation, industrial expansion, and evolving socio-cultural transformations. Rapid population growth and the spatial spread of

peri-urban settlements have intensified pressure on fragile ecosystems, contributing to deforestation, wetland encroachment, biodiversity loss, and increased exposure to pollution-related hazards. Concurrently, the dominance of extractive industries, particularly petroleum exploitation, has compounded environmental vulnerability through recurrent oil spills, gas flaring, and infrastructural disturbances that disrupt ecological balance and undermine sustainable livelihoods (Adekola & Mitchell, 2011; UNEP, 2011). Although regulatory frameworks and environmental protection policies have been instituted at both national and regional levels, enforcement challenges and weak institutional capacity often limit their effectiveness. This disparity between policy intent and ecological outcomes underscores the importance of examining behavioural and cultural determinants that shape environmental stewardship at the community level (Ibaba, 2010).

Historically, indigenous religious cosmologies across the Niger Delta functioned as embedded normative systems that regulated human-environment interactions. Through mechanisms such as sacred groves, ritual prohibitions, totemic restrictions, and ancestral sanctions, traditional belief systems cultivated moral accountability and collective responsibility toward natural resource management. These cultural constructs fostered conservation-oriented behaviours by sacralising elements of the natural environment, thereby integrating ecological ethics into everyday social practice (Berkes, 2012; Orlove & Brush, 1996). Such indigenous epistemologies not only structured ecological governance but also reinforced intergenerational transmission of environmental knowledge, sustaining adaptive resilience within local socio-ecological systems. In Obio-Akpor Local Government Area, processes of rapid urbanisation and increasing religious pluralism have reshaped traditional value orientations, potentially weakening the normative authority of indigenous ecological taboos and ritual obligations. The proliferation of modern religious movements, combined with urban-induced socio-economic transitions, has contributed to the reconfiguration of cultural identities and environmental perceptions. Consequently, previously entrenched indigenous conservation norms may be undergoing reinterpretation or decline, thereby influencing household-level environmental behaviour in complex ways. Investigating the continuing relevance and transformation of indigenous belief systems within this evolving socio-cultural landscape is essential for designing culturally grounded sustainability strategies that resonate with local worldviews and promote participatory environmental governance (Agrawal, 1995; Pretty, 2003).

Statement of the Problem

Persistent environmentally harmful practices such as indiscriminate waste disposal and poor community sanitation remain evident in many urbanising communities within Obio-Akpor despite policy interventions. Contemporary environmental management approaches often prioritise formal regulatory mechanisms while neglecting indigenous cultural and religious normative systems that historically governed ecological behaviour. The limited empirical evidence examining the perceived influence of indigenous religious beliefs on environmental behaviour constrains the formulation of culturally responsive environmental governance strategies.



Research Questions

1. What is the perceived influence of indigenous religious beliefs on environmental behaviour among households in Obio-Akpor Local Government Area?
2. How do socio-cultural factors mediate the relationship between indigenous religious beliefs and environmental conservation practices?

Objectives of the Study

1. To assess the perceived influence of indigenous religious beliefs on environmental behaviour among households in Obio-Akpor Local Government Area.
2. To examine socio-cultural factors associated with variations in environmentally responsible behaviour among households.

Empirical Review

Empirical scholarship across diverse African socio-ecological settings consistently demonstrates that indigenous religious cosmologies function as critical determinants of environmental behaviour, primarily through culturally embedded systems of regulation and moral obligation. In many traditional African societies, ecological governance has historically been mediated by belief structures that sacralise natural resources, thereby shaping patterns of land utilisation, forest conservation, and water resource stewardship. Sacred taboos, ritual prohibitions, and communal sanctions have served as effective informal institutions for

environmental management, reinforcing collective accountability and promoting sustainable resource use in contexts where formal regulatory frameworks remain limited (Byers et al., 2001; Sheridan & Nyamweru, 2008). These indigenous normative systems often operate within complex cosmological frameworks that conceptualise the natural environment as spiritually inhabited, thereby integrating ecological responsibility into broader moral and social obligations.

Nevertheless, processes of urbanisation, religious pluralisation, and socio-economic transformation have increasingly moderated adherence to traditional ecological ethics across the continent. The expansion of urban settlements and the diffusion of globalised religious movements have contributed to the reconfiguration of indigenous cultural practices, leading in some instances to the erosion of sacred environmental norms and the emergence of hybridised belief systems. Empirical evidence suggests that these transformations may alter patterns of environmental engagement by weakening customary mechanisms of ecological regulation while simultaneously introducing new institutional or ideological frameworks for resource governance (Gadgil et al., 1993; Taringa, 2006). This dynamic interplay between continuity and change underscores the need to conceptualise indigenous environmental ethics not as static relics but as evolving cultural constructs embedded within shifting socio-ecological contexts.

Within the Nigerian context, research indicates that indigenous ecological knowledge continues to inform community-based environmental stewardship, particularly in



rural and peri-urban settings where customary institutions retain sociocultural legitimacy. Traditional practices such as sacred grove preservation, seasonal resource restrictions, and ritualised environmental observances persist as mechanisms for sustaining biodiversity and regulating human-environment interactions. However, generational transitions, educational exposure, and the influence of formal governance structures have introduced variability in behavioural adherence to these indigenous norms. Consequently, contemporary environmental behaviour reflects a negotiated synthesis of traditional ecological epistemologies and modern institutional influences, highlighting the importance of integrating culturally grounded knowledge systems into sustainable development strategies and environmental policy frameworks (Oladele, 2012; Salami et al., 2019).

Theoretical Review

Understanding environmental behaviour within culturally complex socio-ecological systems requires engagement with theoretical frameworks that explain how belief systems, social norms, and structural contexts shape human interactions with the natural environment. In the present study, the relationship between indigenous religious beliefs and environmental stewardship can be theoretically anchored in perspectives drawn from cultural ecology, the theory of planned behaviour, and socio-ecological systems theory. These frameworks collectively illuminate the mechanisms through which culturally embedded cosmologies influence environmental decision-making and conservation practices.

Cultural Ecology Theory

Cultural ecology provides a foundational lens for examining how human cultures interact with and adapt to ecological systems. The theory posits that environmental behaviour is shaped by culturally transmitted knowledge, belief systems, and value orientations that guide resource utilisation and environmental management. Indigenous cosmologies, which often sacralise elements of the natural environment, function as normative systems that regulate ecological practices through symbolic meanings, ritual obligations, and communal sanctions. Such culturally embedded ecological ethics contribute to sustainable environmental outcomes by integrating conservation norms into everyday social life. Contemporary scholarship underscores the continued relevance of cultural ecology in explaining community-based environmental stewardship, particularly in regions where indigenous knowledge systems remain influential in shaping land-use practices and biodiversity conservation (Berkes, 2018; Sponsel, 2020).

Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) offers a complementary behavioural framework for understanding how indigenous belief adherence translates into observable environmental practices. According to TPB, individual behaviour is determined by behavioural intentions, which are shaped by attitudes, subjective norms, and perceived behavioural control. Within indigenous socio-cultural contexts, religious cosmologies contribute to the formation of subjective norms by defining moral expectations regarding environmental responsibility. Ritual sanctions and spiritual beliefs may also influence perceived behavioural control by reinforcing the perceived consequences of ecological transgressions. Empirical studies in environmental psychology demonstrate

that culturally grounded normative systems significantly influence pro-environmental attitudes and behavioural intentions, thereby mediating the relationship between belief systems and environmental action (Ajzen, 2020; Yuriev et al., 2020).

Socio-Ecological Systems Theory

Socio-ecological systems (SES) theory conceptualises environmental sustainability as an outcome of dynamic interactions between social institutions and ecological processes. This framework recognises indigenous knowledge systems as integral components of adaptive governance structures that enhance ecological resilience. By embedding environmental norms within social institutions such as kinship networks, traditional leadership, and religious practices, indigenous cosmologies contribute to the regulation of resource use and the maintenance of ecosystem integrity. Recent theoretical developments emphasise that integrating indigenous ecological ethics into formal governance mechanisms can strengthen participatory environmental management and promote contextually appropriate sustainability interventions (Folke et al., 2016; Reyers et al., 2018).

Integrative Theoretical Perspective

Taken together, these theoretical perspectives suggest that indigenous religious beliefs function not merely as cultural artefacts but as active determinants of environmental behaviour within evolving socio-ecological systems. Cultural ecology explains the embeddedness of conservation norms in traditional belief systems; the Theory of Planned Behaviour elucidates the cognitive-behavioural mechanisms through which these norms influence individual action; and socio-ecological systems theory highlights the broader institutional and ecological implications of culturally grounded environmental governance. This integrative theoretical framework provides a robust conceptual basis for examining how indigenous cosmologies continue to shape environmental stewardship in rapidly urbanising contexts such as Obio- Akpor Local Government Area.

Methodology

Method of Data Analysis

Data obtained from the structured household questionnaire were coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Prior to statistical computation, data screening procedures were conducted to identify missing values, inconsistencies, and potential outliers, while negatively worded items were reverse-coded where necessary. Composite indices were generated for key constructs, including indigenous religious belief adherence and environmental behaviour, and the internal consistency of measurement scales was assessed using Cronbach's alpha reliability coefficients.

Descriptive statistical techniques, including frequencies, percentages, means, and standard deviations, were employed to summarise respondents' socio-demographic characteristics and to describe the overall pattern of environmental behaviour among households. To determine the perceived influence of indigenous religious beliefs on environmental behaviour, Pearson Product-Moment Correlation analysis was used to



examine the strength and direction of association between the principal variables. Subsequently, simple linear regression analysis was conducted to estimate the predictive contribution of indigenous belief adherence to variations in environmentally responsible behaviour.

To examine the mediating role of socio-cultural factors, hierarchical multiple regression analysis was utilised, allowing for the incremental inclusion of variables such as age, educational attainment, and religious affiliation in successive regression models. This approach enabled assessment of both the direct and moderated relationships between indigenous belief systems and environmental conservation practices. In addition, one-way analysis of variance (ANOVA) was applied to test for statistically significant differences in environmental behaviour across categories of religious affiliation. All inferential statistical analyses were interpreted at a 0.05 level of significance.

RESULTS

Research Question 1

What is the perceived influence of indigenous religious beliefs on environmental behaviour among households?

Table 1

Correlation between Indigenous Religious Beliefs and Environmental Behaviour (N = 312)

Variable	r	p
Indigenous religious beliefs × Environmental behaviour	0.46	0.000

Research Question 2

How do socio-cultural factors mediate the relationship between indigenous beliefs and environmental conservation practices?

Table 2

Multiple Regression Showing Influence of Indigenous Beliefs and Socio-Cultural Factors on Environmental Behaviour

Predictor	β	p
Indigenous religious beliefs	0.34	0.000
Age	0.18	0.001
Education	0.24	0.000
Religious affiliation	0.16	0.001

Interpretation

- 1) Indigenous beliefs significantly influence environmental behaviour.
- 2) Socio-cultural factors strengthen this relationship.
- 3) Education shows the strongest moderating role.

Discussion of Findings

The findings of this study demonstrate that indigenous religious belief adherence exerts a statistically significant positive influence on environmentally responsible behaviour among households in Obio-Akpor Local Government Area. This outcome aligns with contemporary scholarship indicating that indigenous ecological knowledge systems function as culturally embedded regulatory mechanisms that shape resource-use practices, environmental ethics, and conservation behaviour across African socio-ecological contexts. Recent analyses emphasise that Indigenous and Local Knowledge (ILK) contributes meaningfully to climate adaptation and ecosystem governance, particularly in regions where formal environmental institutions are weak or insufficiently responsive to local realities (Leal Filho et al., 2022). Similarly, emerging empirical syntheses across African contexts reveal that sacred ecological norms, including ritual prohibitions and spiritual sanctions, continue to support biodiversity protection, soil conservation, and sustainable agroecological practices (Osei & Asantewa, 2025).

The positive correlation observed between indigenous belief adherence and household environmental behaviour reinforces theoretical propositions that culturally embedded cosmologies generate normative incentives for ecological stewardship. Such belief systems sacralise elements of the natural environment, thereby fostering behavioural compliance through moral obligation rather than purely regulatory enforcement. Evidence from recent participatory studies in West African coastal ecosystems further demonstrates that indigenous environmental knowledge contributes to the resilience of mangrove and wetland systems when integrated with contemporary conservation frameworks (Tcheton et al., 2025). These findings collectively suggest that indigenous ecological ethics remain viable socio-cultural instruments for promoting sustainable environmental governance at the community level.

However, the moderating influence of socio-cultural factors observed in this study reflects broader structural transformations shaping environmental behaviour in rapidly urbanising African settings. The significant effects of education, age, and religious affiliation indicate that environmental stewardship is increasingly mediated by hybridised knowledge systems that combine traditional cosmological norms with modern institutional and educational influences. Recent scholarship emphasises that while indigenous knowledge continues to support sustainable resource management, generational transitions and exposure to globalised socio-economic systems have introduced variability in adherence to traditional ecological practices (Sahani et al., 2025). This dynamic interplay between continuity and transformation underscores the evolving character of indigenous environmental ethics within contemporary socio-ecological contexts.

Furthermore, the observed behavioural variability across religious affiliations reflects the broader phenomenon of religious pluralisation and cultural negotiation in urbanising regions of sub-Saharan Africa. Contemporary analyses suggest that the erosion of traditional belief systems does not necessarily result in the disappearance of indigenous ecological knowledge but rather in its adaptation into syncretic forms that coexist with formal environmental governance structures (Olaopa, 2025). This adaptive resilience highlights the importance of recognising indigenous cosmologies as evolving cultural frameworks capable of complementing modern sustainability initiatives.

Taken together, these findings support the argument that indigenous ecological ethics constitute an essential yet underutilised component of environmental governance strategies in developing socio-ecological systems. Integrating culturally grounded knowledge with formal environmental policies may enhance community participation, strengthen behavioural compliance, and improve sustainability outcomes. Such integrative approaches resonate with emerging global discourses advocating for the inclusion of indigenous knowledge systems in biodiversity conservation and climate adaptation frameworks (UNESCO, 2026).

Conclusion

Indigenous religious beliefs continue to influence environmental behaviour among households in Obio-Akpor, although their normative strength varies across socio-cultural contexts. Integrating indigenous ecological knowledge into environmental governance can strengthen culturally responsive sustainability interventions.

Recommendations

1. Environmental education initiatives should incorporate indigenous ecological ethics.
2. Traditional institutions should be engaged in participatory environmental governance.
3. Policymakers should recognise informal cultural regulatory mechanisms in sustainability strategies.
4. Future research should examine intergenerational transformations in environmental values.



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