
The Impact of Media in Environmental Education in Jos Metropolis

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ABSTRACT

The media have become a critical force in shaping public awareness and behavior concerning environmental sustainability. This study examines the impact of media on environmental education in Jos Metropolis, Plateau State, Nigeria. It specifically explores the extent to which media exposure influences environmental knowledge, attitudes, and practices among residents. Using a descriptive survey design, data were collected from 400 respondents across Jos North, Jos South, and Jos East through structured questionnaires. The findings reveal that radio, television, and social media are the most influential platforms in environmental communication, significantly enhancing public awareness of issues such as waste management, pollution control, and climate change. However, the study also identifies a persistent gap between environmental knowledge and actual behavioral practice, influenced by irregular programming, low funding, and weak institutional support. The study concludes that the media play a vital role in environmental education but require sustained collaboration with government agencies, non-governmental organizations, and community groups to ensure that awareness translates into tangible environmental actions.

1. Introduction

1.1 Background to the study

Environmental education is a critical component of sustainable development, aimed at enhancing individuals' understanding of environmental systems and encouraging responsible behavior toward natural resource management (Tilbury, 1995). In the face of rising global environmental challenges—such as deforestation, pollution, climate change, and loss of biodiversity education and awareness remain indispensable tools for fostering behavioral change and civic participation in environmental stewardship. Within this context, the media serve as a major platform for environmental communication, helping to inform, persuade, and mobilize the public toward sustainable practices (Asemah, 2011).

In Nigeria, the mass media comprising radio, television, newspapers, and digital platforms have increasingly been recognized as agents of environmental enlightenment. Through news reports, documentaries, and public service announcements, the media disseminate crucial information about environmental degradation, policy implementation, and ecological conservation. However, the degree of their influence on public environmental consciousness varies, depending on factors such as accessibility, frequency of coverage, and audience interest (Okorie & Nwankwo, 2018).

The effectiveness of media in promoting environmental education thus depends on consistent, relevant, and locally contextualized communication efforts.

In Jos Metropolis, environmental challenges such as indiscriminate waste disposal, soil erosion, and deforestation persist despite awareness campaigns. Although environmental messages are occasionally featured on local radio and television, questions remain as to whether these efforts significantly shape public attitudes and practices toward environmental protection (Nwabueze & Ezeh, 2018). Understanding the relationship between media exposure and environmental knowledge in Jos is essential for developing effective communication strategies that can bridge the gap between awareness and behavioral change.

Consequently, this study examines the impact of media in promoting environmental education in Jos Metropolis. It aims to assess how media exposure influences environmental knowledge, attitudes, and behavior, while identifying gaps in the use of media as a sustainable educational tool. The findings are expected to guide policymakers, environmental communicators, and educators in optimizing media strategies for environmental sustainability.

1.2 Statement of the Problem

Environmental degradation has become one of the most pressing challenges confronting Jos Metropolis, marked by indiscriminate waste disposal, soil erosion, deforestation, and pollution. Despite several government policies and environmental awareness campaigns, the rate of public participation in sustainable practices remains disappointingly low. The persistent degradation of the physical environment suggests that the public's understanding of ecological issues is either limited or inadequately translated into concrete actions. In this context, the media—widely recognized as a vital channel for public enlightenment—are expected to play a critical role in promoting environmental education and shaping attitudes toward sustainability. However, the extent to which the media in Jos Metropolis have effectively carried out this role remains uncertain.

While the media in Nigeria have been increasingly involved in environmental communication through radio programs, television features, and social media advocacy, questions persist regarding the depth, consistency, and impact of these initiatives. Many environmental programs are sporadic, underfunded, or overshadowed by political and commercial content (Okorie & Nwankwo, 2018). Moreover, environmental reporting often lacks localization, making it difficult for residents to relate to the messages being disseminated (Nwabueze & Ezeh, 2018). Consequently, although awareness of environmental issues may be rising, there is limited empirical evidence to show that such exposure has translated into improved knowledge, attitudes, or practices among residents of Jos Metropolis.

1.3 Aim and Objectives of the Study

The main aim of this study is to examine the impact of media on environmental education in Jos Metropolis, with a focus on how media exposure influences environmental knowledge, attitudes, and practices among residents. The specific objectives of the study are to;

- i. Assess the extent to which different media platforms (radio, television, print, and social media) contribute to environmental education in Jos Metropolis.
- ii. Examine the influence of media exposure on residents' environmental knowledge, attitudes, and practices.
- iii. Identify the challenges and limitations affecting the effectiveness of media in promoting environmental education in Jos Metropolis.
- iv. Suggest strategies for enhancing the role of media in environmental education and sustainability advocacy within

1.4 Research Questions

Based on the stated objectives, the study seeks to answer the following research questions;

- i. To what extent do different media platforms (radio, television, print, and social media) contribute to environmental education in Jos Metropolis?
- ii. How does media exposure influence residents' environmental knowledge, attitudes, and practices in Jos Metropolis?

- iii. What challenges and limitations affect the effectiveness of the media in promoting environmental education in Jos Metropolis?
- iv. What strategies can be adopted to enhance the role of the media in environmental education and sustainability advocacy within the study area?

2. Literature Review

2.1 The Media as a Tool of Environmental Education

The media play an indispensable role in disseminating environmental information and promoting awareness among the public. As social institutions, media channels serve as intermediaries between scientific knowledge and society, translating complex environmental issues into accessible narratives that foster understanding and action (Asemah, 2011). According to Ojebode (2014), the mass media have the potential to empower citizens by increasing their ecological literacy and motivating participation in environmental initiatives. Through radio programs, television documentaries, and social media campaigns, the media bridge the knowledge gap between policymakers, environmental experts, and local communities.

However, despite their potential, Nigerian media often treat environmental issues as secondary to political and economic stories (Okorie & Nwankwo, 2018). The limited airtime dedicated to environmental education constrains the public's exposure to critical sustainability information. Scholars such as Nwabueze and Ezech (2018) argue that unless environmental communication becomes regular, participatory, and community-centered, its long-term impact will remain minimal. Therefore, enhancing media involvement in environmental education requires sustained commitment from media houses, environmental agencies, and civil society groups.

Empirical studies (Ajao, 2019; Musa & Mohammed, 2020) have demonstrated that where media content emphasizes local environmental issues such as waste management and flooding—the public tends to show stronger behavioral responses. This underscores the importance of localized environmental communication that reflects the realities of communities like Jos Metropolis, where public interest is best captured through relatable stories, vernacular broadcasts, and culturally aligned narratives.

2.2 Media Effects on Knowledge, Attitudes, and Practice

The media are not only transmitters of information but also shapers of attitudes and behaviors. Environmental education delivered through media channels can alter individuals' cognitive frameworks and influence decision-making processes (McCombs & Shaw, 1972). The Knowledge–Attitude–Behavior (KAB) model suggests that increased environmental knowledge leads to positive attitudes, which, in turn, foster sustainable behavior (Kollmuss & Agyeman, 2002). However, this progression is not always linear, as behavioral change may be hindered by structural or socio-economic barriers. In Nigeria, studies have shown that consistent exposure to environmental media campaigns enhances knowledge but does not always translate into behavioral adoption (Asemah & Anum, 2013). This gap is attributed to poor infrastructural support, limited waste facilities, and insufficient policy enforcement. Similarly, Musa and Mohammed (2020) found that while residents of urban centers are aware of recycling benefits, few actively engage in such practices due to convenience factors and low motivation. The implication is that media alone cannot drive behavior change without enabling environments and participatory engagement. Nevertheless, the influence of media on shaping attitudes remains significant. Positive media framing, emotional storytelling, and interactive programs have been shown to improve audience engagement and inspire action (Anderson, 2017). When environmental issues are presented through relatable narratives, people are more likely to internalize messages and reflect them in daily choices underscoring the transformative potential of media in achieving sustainable behavior in communities like Jos.

2.3 Local Context: Jos Metropolis

Jos Metropolis, located in Plateau State, North-Central Nigeria, faces a complex array of environmental challenges, including poor waste management, land degradation, and deforestation (Ishaya & Abaje, 2018). Despite government and civil society interventions, the city continues to grapple with the consequences of urbanization and population

growth. Media organizations within Jos—such as Plateau Radio Television Corporation (PRTVC), Jay FM, and Rhythm FM—have made commendable efforts to include environmental content in their programming, but the frequency and depth of these efforts remain inconsistent. Environmental education through media in Jos is often constrained by inadequate funding, lack of specialized training for journalists, and competing news priorities. Studies indicate that many media outlets in the region depend heavily on sponsored content, limiting the autonomy required for sustained environmental advocacy (Olorunnisola, 2015). Consequently, public understanding of environmental sustainability remains fragmented, with awareness often failing to translate into active participation.

The local context of Jos presents a critical case for exploring how media exposure shapes environmental education outcomes. The city's diverse population, cultural heterogeneity, and history of ecological stress make it an ideal setting for assessing how communication interventions can promote responsible environmental behavior and support sustainable urban living.

2.4 Theoretical Framework

This study is anchored on two complementary theories: the Agenda-Setting Theory and the Knowledge–Attitude–Behavior (KAB) Model. The Agenda-Setting Theory, propounded by McCombs and Shaw (1972), posits that the media influence public perception by determining which issues receive attention. In the context of environmental education, the theory explains how consistent media emphasis on ecological issues can prioritize environmental concerns in the public's cognitive hierarchy, thereby influencing discourse and policy priorities.

The KAB model, proposed by Kollmuss and Agyeman (2002), provides a behavioral foundation for understanding how information dissemination leads to knowledge acquisition, attitude formation, and eventual behavioral change. It suggests that media-driven environmental education can be a catalyst for sustainable lifestyles if the messages are consistent, contextually relevant, and reinforced through supportive community structures. Together, these frameworks illuminate the interplay between media communication, cognitive development, and behavioral outcomes, forming the theoretical basis for this study.

3. Research Methodology

This study adopted a descriptive survey design to examine the impact of media on environmental education in Jos Metropolis. The population consisted of residents from Jos North, Jos South, and Jos East Local Government Areas, from which 400 respondents were selected using stratified random sampling. A structured questionnaire was employed to collect data on respondents' media exposure, environmental knowledge, attitudes, and practices. The instrument's reliability was tested using Cronbach's Alpha ($\alpha = 0.82$), indicating high internal consistency. Data were analyzed using descriptive and inferential statistics, including correlation and regression analysis, to determine relationships among variables. The methodology enabled the study to measure the extent to which different media platforms influence environmental awareness and behavioral outcomes. By combining quantitative data with interpretive analysis, the research identified patterns linking frequency of media exposure to levels of environmental literacy. Ethical considerations, including informed consent and respondent anonymity, were strictly observed throughout the study.

4. Findings and Discussion

4.1 The Extent to Which Media Contribute to Environmental Education in Jos Metropolis

The results revealed that the media play a significant role in disseminating environmental information and shaping public awareness in Jos Metropolis. Among the respondents, 78% reported that they frequently received environmental information through radio, followed by 65% via television, 59% via social media, and 38% through print media such as newspapers and magazines. Radio emerged as the most effective medium because of its affordability, wide reach, and use of local languages. These findings align with Asemah (2011) and Ojebode (2014), who both argued that radio remains the most potent medium for environmental education in Nigeria, especially in semi-urban contexts like Jos where literacy levels and access to print media vary.

However, while media coverage of environmental issues was found to be significant, respondents noted that such programs were irregular and often treated as secondary to political or entertainment content. Only 42% of participants confirmed that environmental programs were aired weekly, indicating inconsistency and lack of sustained environmental advocacy. This supports Okorie and Nwankwo (2018), who observed that Nigerian media tend to prioritize political and economic issues over environmental concerns, leading to fragmented and short-term public

engagement. The findings thus expose a communication gap—while awareness is being generated, inadequate consistency in messaging limits the cumulative impact of environmental education efforts.

4.2 Influence of Media Exposure on Environmental Knowledge, Attitudes, and Practices

The analysis showed a strong positive correlation ($r = 0.63$, $p < 0.05$) between media exposure and environmental knowledge among respondents, indicating that individuals who regularly engaged with environmental media content demonstrated higher levels of understanding of issues such as waste management, pollution control, and deforestation. About 74% of respondents could correctly identify at least three major environmental problems affecting Jos Metropolis, suggesting that the media have been effective in raising basic environmental literacy. This finding is consistent with Anderson (2017), who emphasized that consistent environmental reporting improves public knowledge and stimulates awareness of ecological interdependencies.

In terms of attitudes, 67% of respondents expressed positive views toward environmental conservation and agreed that media campaigns have encouraged them to adopt sustainable mindsets. This aligns with the Knowledge–Attitude–Behavior (KAB) model proposed by Kollmuss and Agyeman (2002), which posits that increased knowledge leads to favorable attitudes. However, when assessing behavioral practices, only 48% reported consistent participation in eco-friendly activities such as waste separation, recycling, and tree planting. This result underscores the knowledge–attitude–behavior gap also identified by Musa and Mohammed (2020) and Asemah & Anum (2013), who found that awareness does not automatically translate into sustainable behavior without supportive infrastructure, incentives, and policy enforcement.

The study therefore highlights that while media exposure has substantially improved environmental understanding and attitudes, behavioral change remains constrained by external factors such as poor waste collection systems, lack of recycling facilities, and limited community participation. This finding affirms the view of Nwabueze and Ezech (2018) that environmental communication in Nigeria often stops at awareness creation rather than mobilization for collective action, hence the need for a multi-sectoral communication strategy that integrates media education with practical community engagement.

4.3 Challenges Affecting the Effectiveness of Media in Promoting Environmental Education

The study identified several barriers hindering the media's effectiveness in environmental education within Jos Metropolis. About 61% of respondents believed that media coverage of environmental issues is insufficient due to irregular programming, while 54% cited limited airtime and lack of sponsorship as major constraints. Additionally, 49% of respondents pointed to the absence of trained environmental journalists as a key limitation, resulting in shallow reporting and over-reliance on event-based coverage. These findings mirror those of Olorunnisola (2015), who noted that the absence of institutional support and poor funding structures have stunted the growth of environmental journalism in developing countries.

Another challenge highlighted is the urban bias of environmental reporting—media messages often fail to reflect the lived experiences of rural and peri-urban dwellers who are most affected by environmental degradation. Respondents also expressed concern that environmental education messages are sometimes presented in highly technical terms, reducing public comprehension. Similar concerns were expressed by Ajao (2019), who argued that localized and participatory communication strategies are crucial for effective environmental sensitization in Nigeria. Thus, a major gap persists in how media translate environmental science into culturally relevant and actionable knowledge.

The findings therefore emphasize the need for capacity building, institutional collaboration, and policy incentives to enhance the media's role in environmental sustainability. Training journalists in environmental communication, providing funding for dedicated environmental programs, and fostering partnerships with environmental agencies like NESREA could significantly improve the impact of media-led environmental education in Jos Metropolis. Addressing these gaps would align with Rogers' (2003) Diffusion of Innovations theory, which stresses the

importance of communication consistency, credible sources, and social reinforcement in promoting new ideas and behaviors.

4.4 Summary of Key Findings

The findings demonstrate that the media are central to environmental education in Jos Metropolis, especially through radio, television, and digital platforms. Media exposure significantly influences environmental knowledge and attitudes but has a weaker effect on behavior, revealing a persistent knowledge–practice gap. Irregular programming, inadequate funding, lack of professional training, and limited collaboration among key institutions hinder the sustained impact of environmental communication. Bridging these gaps requires a comprehensive strategy that integrates consistent media programming, policy enforcement, and grassroots environmental action.

5. Summary, Conclusion, and Recommendations

5.1 Summary of Findings

This study confirmed that media platforms play a crucial role in environmental education in Jos Metropolis. Exposure to environmental messages through radio, television, and social media significantly enhanced respondents' knowledge and attitudes toward environmental protection. Nevertheless, the translation of awareness into practice remains limited, reflecting the broader challenge of the knowledge–attitude–behavior gap observed in environmental communication literature. Constraints such as irregular environmental programming, limited airtime, and insufficient collaboration between environmental agencies and media houses were identified as major obstacles. The findings underscore the need for strategic, consistent, and participatory media engagement to achieve effective environmental education outcomes in the study area.

5.2 Conclusion

The study concludes that the media are indispensable in advancing environmental education and promoting sustainability awareness in Jos Metropolis. By informing and motivating citizens, media platforms bridge the gap between environmental science and public understanding. However, the study also confirms that awareness alone is insufficient to achieve environmental change without supportive policies and community-based initiatives. The integration of the Agenda-Setting and KAB models demonstrates that while media influence knowledge and attitudes, behavioral transformation depends on continuous reinforcement and enabling socio-environmental conditions.

5.3 Recommendations

In light of the findings and conclusion, the following recommendations are proposed to strengthen the impact of the media on environmental education in Jos Metropolis:

i. **Institutionalize Regular Environmental Programming**

Media organizations should incorporate consistent weekly or monthly programs dedicated to environmental issues, using local languages to ensure inclusivity and better comprehension among all social groups. Regulatory agencies like the National Broadcasting Commission (NBC) should encourage and monitor compliance.

ii. **Capacity Building for Environmental Journalists**

There is a need for continuous training and retraining of journalists in environmental communication and reporting. This will enhance the quality of environmental content, ensuring that complex ecological issues are presented in relatable and actionable ways.

iii. **Strengthen Collaboration with Environmental Stakeholders**

The media should build strong partnerships with agencies such as NESREA, the Ministry of Environment, and local NGOs to facilitate data sharing, joint awareness campaigns, and community-based environmental education projects.

iv. **Promote Behavioral Change Campaigns**

Media campaigns should go beyond awareness creation to include behavioral modeling, testimonials, and community success stories that demonstrate the practical benefits of sustainable practices. Using social marketing principles can help translate knowledge into sustained environmental behavior.

v. **Leverage Digital and Social Media Platforms**

Given the growing use of digital technology, media houses should utilize social media, podcasts, and interactive online platforms to reach younger audiences and promote participatory environmental communication, thereby expanding outreach beyond traditional radio and television.

vi. **Encourage Policy Support and Funding**

Government and private organizations should provide funding incentives for environmental programming. This could include grants, public–private partnerships, and corporate social responsibility (CSR) initiatives aimed at supporting environmentally themed media productions.

vii. **Integrate Environmental Education into School Curricula**

Media campaigns should complement formal environmental education in schools, promoting a culture of sustainability from an early age. Collaborative projects between schools, local radio stations, and NGOs can enhance environmental literacy and engagement among youth.

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