ÉKWÉ INTERNATIONAL JOURNAL OF IGBO SCHOLARS FORUM FOR SOCIO-CULTURAL ADVANCEMENT (INC) Volume 19, No 4, OCTOBER, 2026 ISSN: 2476-8448

EXAMINING ALGORITHMIC BIAS AGAINST INDIGENOUS LANGUAGE CONTENT ON FACEBOOK AMONG SOUTH-EAST CONTENT CREATORS

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Abstract

This study investigated perceived algorithmic bias affecting the visibility and treatment of indigenous-language content on Facebook in South-East Nigeria. The study was necessitated by concerns that algorithmic systems may disadvantage indigenous languages in content distribution and moderation. Guided by Algorithmic Justice Theory, the study examined content visibility, effects on content creation, contributing factors, and implications for cultural representation and digital inclusion. A descriptive mixed-methods design was adopted. Using purposive and snowball sampling, data were collected from 384 content creators through questionnaires and 15 in-depth interviews. Of the questionnaires administered, 371 were validly completed, representing a 96.6% response rate. Quantitative data were analysed using frequencies and percentages, while qualitative data were subjected to

thematic analysis. Findings revealed that respondents perceived indigenous-language content as having lower reached and engagement than English-language content. They also reported misinterpretation of indigenous expressions and inconsistent content moderation. Major perceived contributing factors included inadequate indigenous-language datasets, English-language dominance, and limited cultural contextualisation. The study concluded that perceived algorithmic bias could undermine cultural representation and digital inclusion. It recommended inclusive algorithmic training datasets, collaboration with indigenous-language experts, transparent platform practices, and digital literacy training for content creators.

Keywords: Algorithmic bias, Facebook, indigenous languages, cultural representation, digital inclusion.

Background to the Study

The rapid evolution of digital technology has fundamentally transformed communication practices worldwide, particularly through the integration of Artificial Intelligence (AI) into digital communication systems. Social media platforms such as Facebook have become critical arenas for cultural expression, social interaction, and community engagement. Nsude (2024) observes that AI-powered systems increasingly influence how information is processed, prioritized, distributed, and consumed in digital environments. While these technologies offer opportunities for efficiency and innovation, they have also generated concerns about

fairness, inclusiveness, and the representation of diverse linguistic and cultural groups. Consequently, the algorithms that govern content visibility on social media platforms have been increasingly criticized for perpetuating biases, particularly against Indigenous languages and cultures.

At the global level, algorithmic systems act as primary gatekeepers of information, shaping public discourse by controlling visibility and engagement. Chalaganidze and Tsotniashvili (2024) argue that algorithm-driven platforms significantly determine the structure of the contemporary information ecosystem. Similarly, Gorwa, Binns, and Katzenbach (2020) conceptualize algorithmic moderation as a form of governance in which automated systems exert considerable control over digital communication flows.

In the Nigerian context, this transformation has also manifested significantly. Bassey, Lucas, Ogande, and Zuwaira (2024) note that social media algorithms play a crucial role in amplifying or suppressing voices particularly, during socio-political events such as the '#EndBadGovernance' protests. Their study demonstrates that algorithmic amplification influences content reach and engagement, suggesting that these systems are not neutral but actively shape public visibility and participation. Concerns about fairness and bias in algorithmic systems have become increasingly prominent. Ofosu-Asare (2025) argues that algorithmic bias is structurally embedded in AI systems due to unequal data representation and socio-cultural assumptions. This concern is echoed by Okuonghae,

Okonkwo, Okuonghae, and Igbinovia (2025), who found growing awareness among Nigerians regarding the ethical implications of AI bias and algorithmic decision-making. Such concerns are particularly important in culturally diverse societies where technological systems may not adequately reflect local realities.

Algorithmic bias has been shown to reproduce and intensify existing inequalities. Onoh and Slessor (2026) argue that algorithmic systems can reinforce socio-economic disparities when embedded within unequal structural conditions. Focusing on language and culture, Shahid, Elswah, and Vashistha (2025) emphasize that low-resource languages are significantly underrepresented in AI training datasets. This challenge is especially relevant in multilingual societies such as Nigeria, where Indigenous languages like Igbo, Hausa, and Yoruba play vital roles in communication and cultural identity but remain marginalized within many algorithmic systems.

Furthermore, Gwadi and Igbashangev (2024) highlight that AI-driven moderation and fact-checking systems in Nigeria rely heavily on automated tools that often struggle with contextual and linguistic nuances. This limitation becomes more pronounced when dealing with Indigenous language content, which contains cultural meanings and expressions that AI systems may misinterpret. Similarly, Abdullahi (2020) argues that the Nigerian media system is increasingly shifting from traditional human gate keeping to algorithmic gate keeping, while regulatory frameworks remain inadequate

to address the challenges associated with algorithm-driven communication.

At the platform level, Facebook exemplifies these dynamics. The platform relies heavily on algorithmic recommendation and moderation systems, yet the operations of these systems remain largely opaque. This opacity creates challenges for creators using Indigenous languages, as their content may be misclassified, deprioritized, or receive lower levels of visibility. In South-East Nigeria, where the Igbo language serves as an important medium of cultural and social expression, concerns have emerged regarding the visibility and performance of Indigenous language content on Facebook.

Despite these concerns, there remains limited empirical research examining how Facebook's algorithm affects Indigenous language creators in South-East Nigeria. The growing reliance on AI-driven systems, combined with concerns about algorithmic bias and linguistic inequality, highlights the need for scholarly investigation. This study therefore seeks to examine algorithmic bias against Indigenous language content on Facebook among South-East Nigerian creators, with a view to understanding its implications for content visibility, cultural representation, and digital inclusion.

Statement of the Problem

The rapid growth of social media platforms has created unprecedented opportunities for individuals and communities to create, distribute, and monetize digital

content. Platforms such as Facebook have expanded access to information, promoted cultural exchange, and provided content creators with opportunities to reach diverse audiences regardless of geographical location. Ideally, the artificial intelligence (AI) algorithms that power these platforms should distribute content based on relevance, quality, and user preferences without discriminating against creators on the basis of language or cultural background. Such an environment is expected to promote linguistic diversity, cultural inclusion, and equal participation in the digital public sphere.

However, growing concerns among indigenous language content creators suggest that this ideal may not always be achieved. Many creators who publish content in Igbo and other indigenous languages report lower visibility, reduced audience engagement, slower follower growth, and fewer monetization opportunities than creators who publish similar content in English. These experiences have raised concerns that Facebook's algorithm may favour content produced in globally dominant languages while limiting the discoverability of content created in indigenous languages. Since the operation of Facebook's recommendation and moderation systems remains largely opaque, it is difficult to determine whether these disparities result from algorithmic bias, user behaviour, or other platform-related factors.

Although algorithmic bias has attracted increasing scholarly attention, most existing studies have focused on issues such as algorithmic fairness, automated content moderation, misinformation detection, and language bias in global AI systems (Adeyemi & Okorie, 2022; Shahid

et al., 2025). Comparatively little empirical attention has been devoted to understanding how Facebook's algorithms influence the visibility and treatment of indigenous language content in Nigeria, particularly among content creators in the South-East geopolitical zone. Consequently, there is limited context-specific evidence on whether algorithmic bias exists, the factors responsible for it, and its implications for the promotion of indigenous languages, cultural representation, and digital inclusion.

It is against this background that this study investigated algorithmic bias against indigenous language content on Facebook among content creators in South-East Nigeria. Specifically, the study examined the visibility of indigenous language content relative to English-language content, explored how Facebook's algorithm interprets and moderates indigenous language content, identified factors contributing to algorithmic bias, and assessed its implications for cultural representation and digital inclusion. The findings are expected to contribute empirical evidence that can inform platform governance, AI fairness initiatives, digital inclusion policies, and efforts aimed at preserving and promoting indigenous languages in the digital environment.

Objectives of the Study

To examine algorithmic bias against indigenous language content on Facebook among South-East Nigerian creators.

Specific Objectives

1. To assess the visibility of indigenous language content versus English-language content produced by South-East Nigerian creators on Facebook.

2. To examine how algorithmic bias affect content creation on Facebook.

3. To identify the factors contributing to algorithmic bias against indigenous language content in the South East Nigerian context.

4. To evaluate the implications of algorithmic bias for cultural representation and digital inclusion among South-East Nigerian creators.

Research Questions

The study is guided by the following research questions:

1. What is the extent of Artificial Intelligence adoption in journalism in South-East Nigeria?

2. What are the perceived implications of Artificial Intelligence adoption for information integrity and journalistic credibility in South-East Nigeria?

3. How do citizens perceive the implications of AI-mediated journalism for democratic participation in South-East Nigeria?
4. What strategies can promote responsible AI use, information integrity and credible journalism in South-East Nigeria?

Review of Related Literature

Artificial Intelligence, Algorithmic Systems and Linguistic Bias

Artificial Intelligence (AI) refers to computer systems designed to perform tasks associated with human intelligence, including learning, language processing, pattern recognition and decision-making. On social media, AI-powered algorithms influence content recommendation, ranking, distribution and moderation. Gorwa, Binns, and Katzenbach (2020) explain that algorithmic systems have become central to online communication, while Noble (2021) argues that these technologies may reproduce existing social inequalities when their design and data inadequately represent marginalised groups. Algorithmic bias therefore occurs when automated systems systematically disadvantage particular groups, languages or forms of content.

Empirically, Shahid, Elswah, and Vashistha (2025), in their study of colonial biases in automated moderation for low-resource languages, investigated the challenges affecting the moderation of underrepresented languages. Using semi-structured interviews with AI researchers and practitioners, they found that English-centred language models, inadequate linguistic resources and limited access to platform data contributed to moderation errors. The study concluded that these limitations reflected structural inequalities in language technologies. However, it did not examine Facebook's algorithmic practices or the experiences of indigenous-language content creators in South-East Nigeria. The present study

addresses this gap by investigating creators' perceptions of algorithmic bias against indigenous-language content in the region.

Indigenous Language Content and Digital Marginalisation

Indigenous-language content comprises digital messages, videos, stories and other materials produced in native languages to communicate cultural identities, preserve traditions and share local knowledge. UNESCO (2021) emphasises the importance of indigenous languages in cultural preservation and knowledge transmission. However, Ibrahim and Adamu (2023) observe that African digital spaces remain strongly influenced by dominant languages, potentially limiting the representation of local linguistic identities. Such marginalisation may occur through reduced visibility, limited audience engagement and the inadequate interpretation of culturally specific expressions.

Adeyemi and Okorie (2022), in their study of digital exclusion and language marginalisation in Nigeria's online communication environment, investigated inequalities associated with indigenous-language communication using a survey research design. They found that indigenous-language content experienced lower visibility and engagement than English-language content. The study concluded that linguistic inequality remained a challenge in Nigeria's digital environment. Nevertheless, it did not specifically establish how Facebook's algorithmic systems affected indigenous-language creators in South-East Nigeria. The present

study extends this work by examining creators' perceptions of linguistic bias and its implications for the visibility and engagement of their content on Facebook.

Facebook Algorithms, Content Visibility and Creator Experiences

Facebook uses AI-driven systems to recommend, rank and moderate content, influencing what users encounter and how far creators' messages circulate. These systems constitute a form of algorithmic gatekeeping because they influence access to audiences and opportunities for digital participation. Gorwa et al. (2020) highlight the growing influence of algorithmic systems on online information flows, while Are and Briggs (2023) demonstrate the importance of transparency and accountability in platform moderation.

In their empirical study of algorithmic justice in social media content moderation, Are and Briggs (2023) used digital ethnography to examine users' experiences with platform moderation. They found that creators encountered unexplained content restrictions and ineffective appeal mechanisms, raising concerns about transparency and accountability. Similarly, Nwafor and Onwumechili (2023), in their study of algorithmic opacity and media power in emerging democracies, employed qualitative analysis and expert interviews. Their findings showed that limited transparency made it difficult for users to understand algorithmic decisions concerning content visibility and moderation. Although these studies established concerns about algorithmic governance, they did not specifically investigate

linguistic bias against Facebook creators in South-East Nigeria. The present study addresses this contextual gap by examining creators' experiences of content visibility, audience reach and perceived algorithmic disadvantage.

Digital Inclusion, Cultural Representation and Strategies for Addressing Algorithmic Bias

Digital inclusion refers to equitable opportunities to participate in and benefit from digital communication, while cultural representation concerns the visibility of diverse languages, identities and cultural expressions in digital spaces. Van Dijk (2020) highlights inequalities in digital participation, while Couldry and Mejias (2021) explain how digital platforms may reproduce existing social and cultural inequalities. When indigenous-language content receives inadequate recognition or visibility, creators may encounter barriers to audience engagement and cultural expression.

Bassey, Lucas, Ogande, and Zuwaira (2024), in their study of social media algorithms and the amplification of Nigeria's #EndBadGovernance protest, examined how algorithms influenced the circulation of political content through survey and content analysis methods. Their findings showed that algorithmic recommendation affected content visibility and audience reach, demonstrating the importance of platform systems in shaping digital participation. However, their study focused on political mobilisation rather than linguistic inequality, cultural representation or strategies for supporting indigenous-language content. Consequently, it did not establish how creators could address perceived

algorithmic disadvantages associated with indigenous languages.

The present study fills this gap by examining the perceived implications of algorithmic bias for digital inclusion and cultural representation among indigenous-language content creators in South-East Nigeria. It also investigates strategies for improving content visibility, audience engagement and fair representation on Facebook, thereby contributing context-specific evidence to discussions on algorithmic fairness and inclusive digital communication.

Theoretical Framework

Algorithmic Justice Theory

Algorithmic Justice Theory draws on critical scholarship examining fairness, accountability, transparency and inclusiveness in algorithmic systems. Ruha Benjamin's work on discriminatory technological systems provides an important foundation for understanding how technologies that appear neutral may reproduce existing social inequalities. Benjamin (2020) argues that technological systems can reflect the social assumptions and institutional structures embedded in their design, while Noble (2021) demonstrates how algorithmic processes may privilege dominant groups and marginalise underrepresented communities.

The theory is relevant to social media because algorithms influence content recommendation, ranking, distribution and moderation. Where these systems inadequately recognise indigenous languages or

culturally specific expressions, creators may experience reduced content visibility, inappropriate moderation or unequal opportunities to reach audiences. Such outcomes raise questions about algorithmic fairness and whether digital platforms adequately accommodate linguistic and cultural diversity.

The relevance of Algorithmic Justice Theory to the present study lies in its capacity to explain perceived algorithmic disadvantages experienced by indigenous-language content creators on Facebook in South-East Nigeria. It provides a framework for examining creators' experiences of content visibility, audience engagement, moderation and cultural representation, as well as their views on strategies for promoting fairer algorithmic practices. The theory therefore guides the investigation of how Facebook's algorithmic systems may affect indigenous-language content and the opportunities available to its creators.

Methodology

The study adopted a descriptive mixed-methods research design, combining a quantitative survey with qualitative in-depth interviews to examine perceived algorithmic bias against indigenous-language content on Facebook among content creators in South-East Nigeria. The mixed-methods approach enabled the integration of numerical data with participants' experiences and perceptions The study was conducted in Abia, Anambra, Ebonyi, Enugu and Imo States. The population comprised active Facebook content creators who produce content in indigenous languages across the five

states. Since no reliable official record of the population was available, it was treated as unknown. The quantitative sample size was determined using the Topman formula for an unknown population:

$$n = \frac{Z^2 P(1-P)}{e^2}$$

Using a 95% confidence level (1.96), population proportion of 0.50 and margin of error of 0.05, the calculated sample size was approximately 384 respondents. Additionally, 15 content creators were purposively selected for in-depth interviews.

Purposive and snowball sampling techniques were employed to identify eligible respondents. Data were collected using a structured questionnaire and an in-depth interview guide. The instruments were validated by experts in Mass Communication and research methodology. A pilot study was conducted among individuals with similar characteristics outside the main study, and Cronbach's alpha produced a reliability coefficient above the acceptable threshold of 0.70.

Copies of the questionnaire were administered electronically through Facebook creator groups, Messenger, WhatsApp and relevant creator networks, while interviews were conducted virtually, by telephone or face-to-face. Quantitative data were analysed using frequencies and percentages, while qualitative data were subjected to thematic analysis. Findings from both approaches were integrated during interpretation.

Ethical requirements were observed throughout the study. Participants provided informed consent, participation was voluntary, and confidentiality, anonymity and the right to withdraw were respected. All information collected was used strictly for academic purposes.

Results

A total of 384 copies of the questionnaire were administered, out of which 371 were correctly completed and returned, representing a response rate of 96.6%. The analysis is presented according to the research objectives.

Table 1: Demographic Characteristics of Respondents (N = 371)

Variables	Categories	Frequency	Percentage (%)
Gender	Male	212	57.1
	Female	159	42.9
	Total	371	100
Age	18–25 years	76	20.5
	26–35 years	158	42.6
	36–45 years	91	24.5
	46 years and above	46	12.4
	Total	371	100

Variables	Categories	Frequency	Percentage (%)
Educational Qualification	Secondary School Certificate	42	11.3
	OND/NCE	68	18.3
	HND/Bachelor's Degree	187	50.4
	Postgraduate Degree	74	20.0
	Total	371	100
Years of Content Creation on Facebook	Less than 1 year	38	10.2
	1–3 years	121	32.6
	4–6 years	136	36.7
	Above 6 years	76	20.5
	Total	371	100
Primary Language of Content Creation	Igbo	138	37.2
	English	56	15.1
	Igbo and English	154	41.5
	Others	23	6.2
	Total	371	100

Source: Field Survey, 2026

The demographic profile shows that the respondents were sufficiently qualified and experienced to provide reliable information on the subject under investigation. The sample was dominated by active Facebook content creators within the economically productive age bracket, with most possessing tertiary education and several years of content creation experience. In addition, a substantial proportion of the respondents produced content in Igbo or a combination of Igbo and English, confirming their relevance to a study focused on indigenous language content on Facebook.

Table 2: Visibility of Indigenous Language Content on Facebook (N = 371)

Variables	Categories	Frequency	Percentage (%)
Indigenous language content receives lower reach than English content	Yes	286	77.1
	No	85	22.9
	Total	371	100
English-language content receives more engagement	Yes	301	81.1
	No	70	18.9
	Total	371	100
Facebook recommends English content more frequently	Yes	294	79.2

Variables	Categories	Frequency	Percentage (%)
	No	77	20.8
	Total	371	100
Indigenous language content experiences lower audience growth	Yes	278	74.9
	No	93	25.1
	Total	371	100

Source: Field Survey, 2026

The data suggest the existence of noticeable disparities in content visibility on Facebook. Overall, respondents perceived that indigenous language content does not enjoy the same level of exposure, engagement, and audience growth as English-language content. This pattern indicates a possible algorithmic preference for dominant languages, which may place indigenous language creators at a competitive disadvantage within the platform's communication environment

Table 3: How Algorithmic Bias Affect Content Creation on Facebook. (N = 371)

Variables	Categories	Frequency	Percentage (%)

Indigenous language content is often misinterpreted	Yes	282	76.0
	No	89	24.0
	Total	371	100
Content has been unnecessarily flagged or restricted	Yes	264	71.2
	No	107	28.8
	Total	371	100
Cultural expressions are misunderstood by Facebook systems	Yes	291	78.4
	No	80	21.6
	Total	371	100
Moderation decisions are inconsistent	Yes	275	74.1
	No	96	25.9
	Total	371	100

Source: Field Survey, 2026

The findings indicate widespread concerns regarding Facebook's ability to effectively process indigenous language content. The responses suggest that indigenous language expressions and culturally embedded messages are frequently subject to misunderstanding and inconsistent moderation outcomes. This raises questions about the capacity of automated systems to accurately

recognize linguistic and cultural nuances within local communication contexts.

Table 4: Factors Contributing to Algorithmic Bias (N = 371)

Variables	Categories	Frequency	Percentage (%)
Limited indigenous language datasets	Yes	309	83.3
	No	62	16.7
	Total	371	100
Dominance of English-language training data	Yes	315	84.9
	No	56	15.1
	Total	371	100
Lack of cultural understanding in AI systems	Yes	297	80.1
	No	74	19.9
	Total	371	100
Limited platform localization	Yes	286	77.1
	No	85	22.9
	Total	371	100

Source: Field Survey, 2026

The results point to structural and technological limitations as the primary drivers of algorithmic bias. Respondents generally attributed the problem to inadequate representation of indigenous languages in AI development processes and the dominance of English-centered digital infrastructures. The findings imply that existing algorithmic systems may not sufficiently accommodate linguistic diversity within multilingual societies such as Nigeria.

Table 5: Implications of Algorithmic Bias (N = 371)

Variables	Categories	Frequency	Percentage (%)
Algorithmic bias reduces cultural visibility	Yes	310	83.6
	No	61	16.4
	Total	371	100
Bias discourages indigenous language content creation	Yes	288	77.6
	No	83	22.4
	Total	371	100
Bias limits audience growth opportunities	Yes	301	81.1
	No	70	18.9

Variables	Categories	Frequency	Percentage (%)
	Total	371	100
Bias affects digital inclusion	Yes	295	79.5
	No	76	20.5
	Total	371	100

Source: Field Survey, 2026

The findings reveal that algorithmic bias extends beyond issues of content visibility to broader concerns relating to cultural representation and digital participation. Respondents perceived that unequal algorithmic treatment undermines the online presence of indigenous languages and may discourage creators from producing culturally relevant content. The overall implication is that persistent algorithmic bias could contribute to the marginalization of indigenous voices within the digital public sphere.

Analysis of Interview Responses

Fifteen indigenous-language content creators were interviewed, and their responses were analysed thematically in line with the study objectives. Four major themes emerged.

Visibility of Indigenous-Language Content: Most participants perceived that Igbo-language content attracted lower reach, engagement and audience growth than English-language content. Some reported

combining both languages to improve visibility. These accounts corroborated the survey findings on perceived disparities in content visibility.

Perceived Effects of Algorithmic Bias on Content Creation: Participants reported instances in which Igbo expressions, proverbs and culturally specific phrases were allegedly misinterpreted by Facebook's moderation systems, resulting in content flagging or restricted distribution. These experiences suggest possible limitations in the platform's handling of indigenous linguistic and cultural contexts.

Factors Responsible for Algorithmic Bias: Participants attributed the perceived bias to the dominance of English-language data, inadequate indigenous-language resources and limited cultural contextualisation in AI systems. These views were consistent with the survey findings on factors contributing to algorithmic bias.

Implications for Cultural Representation and Digital Inclusion: Participants expressed concern that reduced content visibility could discourage indigenous-language content creation and constrain cultural promotion, language preservation, audience development and digital participation. These concerns reinforced the survey findings regarding the perceived implications of algorithmic bias for cultural representation and digital inclusion.

Discussion of Findings

The study found, from both the quantitative and qualitative data, that indigenous language content

receives lower visibility, engagement, and audience reach on Facebook than English-language content. While the questionnaire responses indicated that most respondents perceived Facebook's algorithm to favor English-language posts, interview participants reinforced this view by explaining that content written in Igbo often records fewer views and interactions despite similar quality. This finding suggests that language significantly influences content visibility on the platform and supports the findings of Shahid, Elswah, and Vashistha (2025) and Adeyemi and Okorie (2022), who reported that indigenous and low-resource languages are disadvantaged within digital platforms.

The quantitative and qualitative findings also converged in showing that Facebook's algorithm encounters difficulties in interpreting and moderating indigenous language content. Respondents agreed that indigenous language posts are sometimes unfairly restricted, while interview participants attributed this to the algorithm's inability to understand local expressions and cultural contexts. This finding is consistent with Are and Briggs (2023) and Gorwa, Binns, and Katzenbach(2020), who observed that automated moderation systems often produce inaccurate outcomes in multilingual environments.

Furthermore, findings from both data sources identified inadequate indigenous language datasets, the dominance of English-language training data, and limited platform localization as the major causes of algorithmic bias. Respondents ranked these among the leading factors, while interview participants emphasized that Facebook

appears to be optimized primarily for dominant global languages. This corroborates the findings of Ibrahim and Adamu (2023) and Nwafor and Onwumechili (2023), who linked platform design to language-based digital inequalities.

Finally, both the survey and interview findings revealed that algorithmic bias negatively affects cultural representation and digital inclusion by discouraging indigenous language content creation, reducing audience growth, and limiting the online visibility of indigenous cultures. These findings support Bassey, Lucas, Ogande, and Zuwaira (2024), who demonstrated that social media algorithms shape online visibility, and further validate Algorithmic Justice Theory, which explains how algorithmic systems can reproduce linguistic inequalities. Overall, the combined quantitative and qualitative evidence indicates that algorithmic bias remains a significant challenge for indigenous language content creators on Facebook in South-East Nigeria.

Summary of Findings

The study examined perceived algorithmic bias against indigenous-language content on Facebook among content creators in South-East Nigeria. The findings revealed that creators perceived their indigenous-language content to receive lower visibility, reach and engagement than English-language content, prompting some to adopt code-switching to improve audience reach. Participants also reported perceived difficulties with Facebook's moderation systems, particularly the alleged misinterpretation of indigenous expressions,

proverbs and culturally specific phrases. The respondents attributed these perceived challenges to the dominance of English-language datasets, inadequate indigenous-language resources and limited cultural contextualisation in algorithmic systems. Furthermore, the findings indicated that perceived algorithmic bias could discourage indigenous-language content creation, limit cultural representation and constrain digital inclusion. Consequently, participants emphasised the need for greater algorithmic fairness, transparency and linguistic inclusion to promote equitable visibility and support the preservation and dissemination of indigenous languages on Facebook.

Conclusion

The study concluded that perceived algorithmic bias presents a potential challenge to the visibility and representation of indigenous-language content on Facebook in South-East Nigeria. Although the platform provides opportunities for cultural expression and audience engagement, concerns about content distribution and moderation may limit these benefits. Promoting linguistic diversity requires more inclusive platform systems, greater transparency and sustained support for indigenous-language content creators.

Recommendations

1. Facebook should expand its algorithmic training datasets to include Igbo and other Nigerian indigenous languages to improve content visibility and recommendation fairness.

2. Facebook should collaborate with Nigerian linguists and indigenous-language experts to improve moderation accuracy and reduce the misinterpretation of cultural expressions.

3. The Nigerian Communications Commission (NCC) and the National Information Technology Development Agency (NITDA) should encourage social media platforms to adopt transparent, fair and inclusive practices in handling indigenous-language content.

4. Universities, media organisations and cultural institutions in South-East Nigeria should provide digital literacy training to help indigenous-language creators improve content quality, visibility and engagement.

Contribution to Knowledge

The study contributed to knowledge by providing context-specific evidence on perceived algorithmic bias against indigenous-language content creators in South-East Nigeria. It extended scholarship on algorithmic justice by connecting content visibility and moderation with linguistic diversity, cultural representation and digital inclusion in the Nigerian social media environment.

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