



Influence of Digital Storytelling in Youth-Led Climate Change Campaigns on Environmental Awareness and Pro-Environmental Behaviour in Enugu, Nigeria

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ABSTRACT

Background: Climate change communication in Nigeria has increasingly leveraged digital media, particularly through youth-led initiatives on social media platforms. However, despite growing attention to online advocacy in this area, existing studies have largely focused on message dissemination and audience engagement, with limited attention on how digital storytelling techniques in youth-led campaigns shape environmental awareness and behaviour.

Objective: This study investigated digital storytelling techniques in youth-led climate change campaigns such as *SustyVibes* and *PreserveOurRoots* and their influence on environmental awareness and pro-environmental behaviour among residents of Enugu, Nigeria.

Method: A mixed method approach was adopted. The qualitative component involved thematic analysis of 30 purposively selected digital materials, including Instagram posts, X threads, and YouTube videos from two youth-led campaigns in Nigeria - *SustyVibes* and *PreserveOurRoots*. These were thematically analysed. The quantitative component comprised a survey of 385 respondents across nine neighbourhoods in the three Local Government Areas in Enugu metropolis (Enugu North, Enugu East and Enugu South LGA), selected using the Australian Calculator. Data were collected using a Likert-scale questionnaire with a consistency coefficient of 0.86. The data were analysed using mean scores and standard deviations.

Results: Findings reveal that the *SustyVibes* and *PreserveOurRoots* campaigns employed relatable visual storytelling, humour, and narrative techniques to communicate climate change and sustainable living messages. These strategies moderately enhanced environmental awareness and positively influenced attitudes, but had limited impact on encouraging active, physical participation in climate action.

Conclusion: Digital storytelling in youth-led climate campaigns in Nigeria can effectively shape environmental awareness and attitudes when messages are engaging and contextually relevant. However, converting this influence into active participation may require deliberate framing of climate action as accessible, rewarding, and socially supported.

Unique Contribution: This study contributes to the literature by linking digital storytelling strategies with behavioural outcomes in the context of youth-led climate campaigns, thereby extending beyond general analyses of social media use to examine narrative influence on environmental communication.

Key Recommendation: The study recommends that development communicators, NGOs, and policymakers strengthen support for youth-led digital storytelling initiatives and integrate strategies that encourage deeper behavioural engagement beyond awareness and attitudinal change.

Keywords: Digital storytelling, climate change, youth-led campaigns, climate awareness, behavioural change



INTRODUCTION

The media, over time, have assumed an important role in shaping perceptions about issues, from politics, to economy and health. In Nigeria, even in issues with far-reaching implications, such as climate change, the media have been a tool for advocacy. While traditional channels once dominated the discourse, social media platforms such as X, Facebook, TikTok and YouTube now provide spaces for participation, where narratives about climate change can be created, shared and debated (Alawade & Obun-Andy, 2024). Abdulrahman and Okpoko (2024) note that this method involving the use of digital tools is more effective for reaching young people, leveraging creative narrative formats to foster emotional connection and increase awareness of climate change more than traditional broadcasts alone can achieve (Pera & Aiello, 2023). From this, digital storytelling has emerged as a communication tool for climate change advocacy, especially among youths.

Digital storytelling involves the creation of personal or community-centered narratives and presenting them through multimedia, including text, images, video, and audio, on digital platforms. This communication strategy is in tandem with development communication principles that emphasize participatory and emotional engagement over top-down messaging. According to Mishra (2024), story-based communication effectively humanizes climate change, builds empathy, and motivates collective behaviour among audiences. Storytelling has been noted for having the potential to simplify complex issues such as climate science, making them relatable and actionable.

Climate change itself is one of the most urgent challenges facing the global and Nigerian population today. Ben Enukora, Soroaye, Ejem, Asogwa, Ojih and Ezeugwu (2025) say that experts have noted that global temperatures are now significantly warmer than in the 1960s, largely due to human activity and natural climate variations. Its effects include rising sea levels, altered rainfall patterns, food insecurity, forced displacement, and increased risk of heat-related deaths, especially among vulnerable populations (World Health Organization, 2023). These realities emphasize the need for accessible, emotionally resonant communication strategies such as digital storytelling, that can help translate abstract scientific data into narratives that inspire awareness and action.

In Nigeria, youth-led climate advocacy groups are increasingly adopting strategies such as storytelling. For example, *SustyVibes*, a Lagos-based collective founded by Jennifer Uchendu, integrates social media campaigns, community clean-ups, art exhibitions, eco-conferences, and digital narratives, particularly through Instagram, X, the Facebook page, and campaigns like *Naija CookWise* and *Eco-Anxiety Africa Project* (AfricaWomenExperts, 2024; SustyVibes, 2025). Similarly, *Preserve Our Roots*, founded by Nigerian teen Amara Nwuneli, employs documentary-style YouTube videos and Twitter threads to tell flood survivor stories and advocate for ecological restoration in the Niger Delta (McFall-Johnsen, 2025). These two campaigns exemplify how Nigerian youth can potentially shape climate communication through digital storytelling across various narrative formats.



However, it is important to understand how audiences are exposed to and engage with youth-led campaigns that focus on climate change using digital storytelling. Thus, finding out how they they perceive, share, and respond to youth-generated climate messages can provide insight into how effective the strategy is, bare the possible challenges and inform communication strategies rooted in participatory development models. As studies demonstrate, whether a message resonates with the audience and induces behavioural change depends on cultural relevance, emotional tone, and accessibility of stories - attributes that digital storytelling could potentially bring to climate communication (Ben-Enukora et al., 2025; Nwafor, 2022).

Although youth-led digital storytelling campaigns ideally should raise awareness, shape pro- climate attitudes, and inspire action, empirical evidence regarding their effectiveness remains limited. Despite the creative vibrancy of these initiatives, there appears to be a discrepancy between storytelling production and its actual influence on audiences, raising important questions about message reception, behavioural influence, and sustainable engagement.

This points to a lacuna in what has been explored on the subject. Prior research has examined digital media's role in youth climate advocacy, especially in relation to content dissemination and public engagement. For example, studies have analysed how alternative media shape climate discourse in Nigeria (Abdulrahman & Okpoko, 2024), how TikTok-based advocacy correlates with youth awareness and adaptation practices (Ben- Enukora et al., 2025), and how social media platforms promote public awareness and engagement with climate change issues (Nwafor et al., 2024). Though these studies focused on digital platforms and youth audiences, they examined climate communication in general terms, often assessing message exposure or platform usage without covering storytelling techniques or youth-created campaigns. As such, they failed to address how specific youth-led digital storytelling initiatives are designed and how such narratives could influence awareness, attitudes, or willingness to act. This study fills that gap by analyzing two prominent youth-led campaigns, namely, *SustyVibes* and *PreserveOurRoots*, to assess both their storytelling strategies and their impact on audience exposure, engagement, and climate-related attitudes.

In line with the above, this study aims to explore how youth- led digital storytelling campaigns contribute to climate change communication and influence audiences, with a particular focus on residents of Enugu Metropolis. Specifically, the study seeks to examine the key messages and storytelling techniques employed in *SustyVibes* and *PreserveOurRoots* digital campaigns on climate change; assess the level of exposure to and engagement with these campaigns; evaluate their influence on awareness of climate change issues; and assess how such campaigns shape attitudes and willingness to engage in climate action.



LITERATURE REVIEW

Climate Change as a Global Problem

Climate change has emerged as one of the most pressing global threats of the 21st century. According to the World Health Organization (2023), the planet is now significantly warmer than it was in the 1960s, with global warming largely driven by human activity and natural fluctuations. Its effects are extensive and alarming—ranging from extreme weather patterns, rising sea levels, and forced displacements to reduced agricultural productivity, biodiversity loss, and increased risks to human and animal health (UNHCR, 2021). In the view of Ben-Enukora and Ejem (2024), progress toward meaningful global climate action is hindered by a lack of advocacy, poor awareness, and weak attitudes toward sustainable practices, particularly among vulnerable populations such as young people.

In Nigeria, the climate crisis is particularly severe, even though the country contributes minimally to global greenhouse gas emissions. Akande, Costa, Mateu and Henriques (2017) observe that the southern region faces extreme rainfall, flooding, and erosion, while the northern parts suffer from drought, desertification, and land degradation. These impacts aggravate food insecurity, increase vulnerability to disease outbreaks, and deepen poverty, especially among already disadvantaged communities (Elisha, Sawa & Lawrence, 2017). As such, addressing climate change in Nigeria requires more than policy; it also calls for effective communication strategies that foster public understanding and behavioural change.

Digital Storytelling as a Tool for Development Communication

Digital storytelling is widely recognized as a powerful participatory communication strategy that empowers individuals and communities to craft and share narratives using multimedia tools and combining text, visuals, audio, and video. According to Isaacs, Tondeur, Howard, Claro, and van Braak (2024), digital storytelling consistently supports the development of key 21st-century competencies such as critical thinking, creativity, and communication across diverse educational contexts. In the context of environmental justice and climate advocacy, storytelling is used to amplify marginalized voices by focusing on lived experiences, especially those directly impacted, and transforming data into personal, emotionally resonant narratives that can spark collective action (Garzon-Galvis, 2025). Such formats enable story-producers to foster narrative change and engage audiences more deeply than traditional informational formats.

In development communication, digital storytelling holds a system of participatory communication where user-generated content and community agency are emphasized. Mishra (2024) suggest that when community members share their own climate-related stories, especially through short, personal video narratives, audiences are more likely to empathize, understand, and take motivated action. Furthermore, it enables youth to connect scientific or environmental information to their own contexts, thereby making complex issues like climate change more relatable and actionable (Isaacs et al., 2024). This shows how digital storytelling holds unique promise as a tool for development communication in climate advocacy, especially when youth are at the center of message creation and dissemination.



Youth Participation in Climate Change Communication

In recent years, young people are increasingly assuming both creator and audience roles in digital campaigns related to climate change. Neas, Ward and Bowman (2022) note that youth activism has shifted from traditional protests to digital spaces, mobilizing through social media storytelling, peer-to-peer content, and online advocacy. Specifically in Nigeria and across Africa, youth groups have harnessed digital media to shape climate discourse, using platforms like X, Instagram, and short-form video apps to share personal experiences, climate concerns, and calls to action (Pera & Aiello, 2023). This reflects a broader trend where young people no longer wait for institutional channels to amplify their climate narratives, they actively build and circulate their own digital stories.

In Nigeria, evidence shows youth-led campaigns such as those by *SustyVibes* and *PreserveOurRoots* are crafting multimedia climate stories that resonate emotionally and culturally among peer audiences and beyond. Their efforts demonstrate how young Nigerians are not only engaging in climate advocacy but are also reshaping how climate messages are constructed and received within their communities.

Empirical Studies on New Media and Climate Change Communication

Fernández, Piccolo, Maynard, Wippoo, Meili and Alani (2021) conducted a study analyzing how climate change messages were framed and structured on Twitter during global climate events. Using content analysis, the researchers sampled 2,300 tweets from high-engagement climate advocacy campaigns and coded them based on narrative structure, emotional tone, and visual content. Their findings revealed that relatable stories and emotionally positive framing (such as hope and empowerment) generated higher levels of audience interaction than abstract scientific language or fear-based messaging. Similarly, Abdulrahman and Okpoko (2024) examine how alternative media challenge dominant narratives on climate change. They employed a qualitative design using focus group discussions with media practitioners and environmental advocates. Thematic analysis showed that youth-focused platforms often used personal storytelling and personal narratives and were framed to evoke empathy, challenge mainstream frames, and prompt critical engagement with climate issues. Both studies demonstrate how narrative strategy and emotional resonance influence the effectiveness of climate storytelling in digital spaces.

Another study by Nwafor et al. (2024) explored Nigerian youths' exposure to and engagement with climate change advocacy on TikTok, focusing on the extent to which platform characteristics influence user behaviour. The study adopted a mixed-methods design, combining survey responses from 420 TikTok users with content analysis of 150 climate-themed videos. Results showed that although youth exposure to climate advocacy videos was generally limited, visually creative content that used trending audio or humorous framing boosted engagement significantly. The study concluded that youth engagement depends not just on message presence but on how content is tailored to platform dynamics and audience expectations.

Furthermore, Gómez- Casillas and Gómez-Márquez (2023) conducted a large-scale quantitative study across four Latin American countries to assess whether digital storytelling via social media correlates with climate change awareness among young people. Using a structured online



questionnaire administered to 1,050 respondents aged 16–30, the study applied regression analysis to determine how platform use, content type, and frequency of exposure related to awareness levels. The results indicated a strong positive correlation between regular use of video-centric platforms (YouTube and Instagram) and awareness of climate science, causes, and consequences. Participants who engaged with short documentaries, visual explainers, or climate influencer content scored consistently higher on knowledge assessments than those with low social media exposure.

Finally, Ben- Eukora et al. (2025) investigated the relationship between TikTok-based climate advocacy and behavioral intentions among Nigerian youth, focusing on how content exposure affects willingness to adopt climate-friendly actions. The researchers used a cross-sectional survey of 600 TikTok users aged 18–29, applying correlation and regression techniques to evaluate associations between exposure frequency, message perception, and attitudinal outcomes. Findings showed no significant correlation between general exposure and behaviour, but campaigns that incorporated local storytelling, trusted youth influencers, and solution-focused narratives had a modest effect on improving pro-climate attitudes. The study suggests that message design, not just exposure, is key to influencing behavioural change among youth audiences.

THEORETICAL FRAMEWORK

This study is based on the assumptions of the Uses and Gratifications Theory (UGT), Framing Theory and the Theory of Planned Behaviour (TPB). The Uses and Gratifications Theory was introduced by Katz and Blumler in 1974, and proposes that audiences are not passive recipients of media but rather active users who seek out content to satisfy specific needs (Vinney, 2024). This theory marked a shift from earlier communication models that viewed media as all-powerful and audiences as reactive. UGT highlights how individuals choose particular media based on personal goals, ranging from information-seeking to emotional connection and entertainment.

UGT identifies five core motivations for media use: cognitive needs (information and knowledge), affective needs (emotional satisfaction), personal integrative needs (self-esteem and credibility), social integrative needs (social interaction and belonging), and tension-release needs (relaxation or escape) (Vinney, 2024). These categories help explain why audiences consume certain media and how their interpretations may differ. In this study, UGT helps explain youth engagement with digital storytelling campaign, such as following youth-led climate advocacy pages for emotional resonance, social identity, or information on climate issues.

Also, Framing Theory, developed prominently by Entman (1993), focuses on how media construct reality by selecting and emphasizing certain aspects of an issue. A frame highlights particular problem definitions, causes, moral judgments, or solutions, shaping how audiences understand and emotionally respond to the issue. In media coverage of climate change, for instance, campaigns may frame the crisis as a youth struggle, a justice issue, or a scientific emergency, each evoking different audience reactions. According to Gever and Coleman (2020),



the framing choices made by communicators significantly affect public perception, attribution of responsibility, and likelihood of public engagement.

Furthermore, the Theory of Planned Behaviour (TPB), developed by Ajzen (1991), posits that an individual's intention to perform a behaviour is the most immediate predictor of that behaviour. Intention itself is shaped by three components: attitudes (positive or negative evaluation of the behaviour), subjective norms (perceived social pressure), and perceived behavioural control (the sense of having the ability or resources to perform the action). TPB has been widely applied in health, environmental, and social psychology research to assess how communication strategies influence attitudes and actions. In climate communication studies, TPB helps researchers understand how exposure to campaign messages can shape attitudes toward climate action, perceived social expectations about climate responsibility, and youths' sense of empowerment to take action (Yuriev et al., 2020; Bamberg & Möser, 2007).

Together, these three theories offer complete insight into youth-led digital storytelling in climate change communication. The Uses and Gratifications Theory explains why audiences might choose to engage with certain campaigns, whether for information, inspiration, or belonging. Framing Theory, on the other hand, helps uncover how messages within these campaigns are constructed to shape interpretation and emotional resonance, while the Theory of Planned Behaviour provides insight into how such exposure might influence deeper attitudinal shifts and intentions toward climate-positive behaviour.

METHODOLOGY

This study adopted a mixed methods research design, combining both qualitative and quantitative approaches to analyse how youth-led digital storytelling campaigns influence climate change awareness and engagement among Nigerians. The qualitative aspect focused on analysing the storytelling strategies and messages employed by two selected youth-led campaigns, namely; *SustyVibes* and *PreserveOurRoots*. Purposive sampling was employed to select a total of 30 digital campaign materials (15 from each organization) based on relevance and engagement level. The materials included Instagram posts, X threads, YouTube videos, and campaign visuals produced between July 2022 and June 2025. A coding guide was used to identify messages and framing patterns and analysis was carried out using thematic analysis.

On the other hand, the quantitative component of the study was conducted through a survey of residents of Enugu Metropolis. The study area had a population of 722,664 in 2006 (National Population Commission, 2006) which was projected to 1,327,534 in 2025 at a growth rate of 3.2%. A representative sample size of 385 respondents was determined using the Australian sample size calculator, based on a 95% confidence level, 5% margin of error, and 50% population proportion. The study employed a three-stage sampling technique: first, the three LGAs were selected using stratified sampling; second, three neighbourhoods were randomly chosen from each LGA (Enugu North: Ogui, Asata, New Haven; Enugu South: Garriki, Achara Layout, Maryland; Enugu East: Emene, Trans-Ekulu, Abakpa). In the third stage, the sample was divided evenly across the 9 neighborhoods ($385 \div 9 = 42$ remainder 7) while the remaining 7 were randomly selected from any of the neighborhoods. Convenience sampling was employed to



administer structured four-point Likert-scale questionnaire the respondents. The instrument was tested for internal consistency using Cronbach's Alpha and produced a reliability coefficient of 0.86. Data collected were analysed using mean averages and standard deviations to identify trends in climate communication engagement among them.

DATA PRESENTATION

Thematic Analysis of Messages and Storytelling Techniques in Youth-Led Digital Climate Change Campaigns (SustyVibes and PreserveOurRoots)

Key Messages

Climate Change as a Public Health and Everyday Issue: Both campaigns frame climate change as a problem with direct implications for health, household practices, and community well-being. For example, SustyVibes highlights the health risks of traditional cooking methods, noting that women and girls bear the greatest burden of indoor air pollution, while questioning the hidden costs of relying on firewood. By connecting climate change to everyday experiences, the campaigns make environmental issues more relatable and encourage audiences to reconsider common practices.

Solutions and Youth Empowerment: Rather than focusing solely on environmental problems, the campaigns promote practical solutions and emphasize the role of young people as agents of change. Through initiatives such as reusable material advocacy and *Intergenerational Cafés*, they encourage sustainable practices and civic participation. PreserveOurRoots reinforces this message with the call, “*Be inspired. Take action,*” highlighting shared responsibility and youth leadership.

Hope, Solidarity, and Collective Action: Both campaigns adopt an optimistic tone that balances concern with hope. Messages such as “*Our planet’s on fire, but hope still burns bright*” encourage collective responsibility while presenting young Nigerians as active contributors to climate solutions rather than passive victims.

Storytelling Techniques Employed

Relatable Language, Humour, and Interactive Questions: The campaigns use conversational language, humour, and rhetorical questions to simplify complex climate issues and stimulate audience engagement. For example, SustyVibes employs humorous memes alongside questions such as “*What does the Styrofoam ban mean for you?*” to make policy discussions more personal and accessible.

Compelling Visuals and Symbolic Imagery: Strong visual elements reinforce campaign messages by illustrating environmental challenges and inspiring action. Images of clogged drainage systems depict the consequences of pollution, while photographs of young people



accompanied by messages such as “*Our voices matter too*” symbolize environmental justice, inclusion, and youth participation.

Personal Narratives and Calls to Action: Authentic stories from young people and community members are used to build credibility and emotional connection. Testimonies on clean cooking and local climate initiatives demonstrate how environmental challenges affect everyday life while presenting practical responses. These narratives are consistently supported by action-oriented prompts such as “*Apply now,*” “*Join the campaign,*” and “*Watch our documentary,*” which encourage audiences to move from awareness to participation.

Quantitative Analysis of Audience Exposure and Campaign Influence on Environmental Awareness and Pro-Environmental Behaviour

Table 1: Exposure and Engagement with the *SustyVibes* and *PreserveOurRoots* Campaigns on Climate Change

ITEMS	FREQUENCY					X	SD	DECISION
	S A	A	D	SD	N			
-I have seen content from the <i>SustyVibes</i> and <i>PreserveOurRoots</i> climate change campaigns	57	101	133	94	385	2.31	1.00	REJECTED
-I follow one or both of <i>SustyVibes</i> or <i>PreserveOurRoots</i> climate change campaign pages	53	91	124	117	385	2.21	1.02	REJECTED
-I have viewed videos or articles shared by the campaign pages	60	95	129	102	385	2.29	1.02	REJECTED
-I often interact with content from the campaign pages	48	85	132	120	385	2.16	1.00	REJECTED
-My exposure to the campaign content has increased in the last 6 months	55	93	128	109	385	2.24	1.02	REJECTED
Cumulative Mean						2.24		

The data on table 1 shows a low level of exposure and engagement with the *SustyVibes* and *PreserveOurRoots* climate change campaigns among respondents in Enugu metropolis. The cumulative mean average of 2.24 which is below the acceptance threshold of 2.5 reveals that though certain respondents were exposed to and engaged with the campaigns, their overall visibility and engagement among the study population remained limited.



Table 2: Influence of *SustyVibes* and *PreserveOurRoots* Campaigns on Climate Change Awareness

ITEMS	FREQUENCY					X	SD	DECISION
	SA	A	D	SD	N			
- The <i>SustyVibes</i> and <i>PreserveOurRoots</i> campaigns have improved my understanding of climate change	91	184	76	34	385	2.86	0.88	ACCEPTED
-I have learned new information about environmental threats through these campaigns	86	189	85	25	385	2.87	0.83	ACCEPTED
-The messages shared by these campaigns are clear and informative	91	176	88	30	385	2.85	0.87	ACCEPTED
-I now recognize the link between local events (like flooding or heat) and climate change	87	178	80	40	385	2.81	0.90	ACCEPTED
-These campaigns have made me more aware of how climate change affects Nigeria	92	181	79	33	385	2.86	0.88	ACCEPTED
Cumulative Mean						2.85		

The analysis on table 2 reveals that *SustyVibes* and *PreserveOurRoots* campaigns have a moderate influence on climate awareness among residents of Enugu Metropolis. The respondents noted that the campaigns improved their understanding, taught them new things, and helped them connect climate change to everyday realities in Nigeria. Though the level of influence was not high, the cumulative mean average of 2.85 shows that the campaigns had a meaningful influence on climate awareness.

Table 3: Influence of *SustyVibes* and *PreserveOurRoots* Campaigns on Attitudes and Willingness to Participate in Climate Action

ITEMS	FREQUENCY					X	SD	DECISION
	SA	A	D	SD	N			
-The <i>SustyVibes</i> and <i>PreserveOurRoots</i> campaigns have motivated me to make eco-friendly lifestyle changes	62	140	115	68	385	2.51	0.96	ACCEPTED
-I am more likely to speak out about climate change issues because of these campaigns	67	160	107	51	385	2.63	0.92	ACCEPTED
-These campaigns have made me feel that individual actions can make a difference	80	165	102	38	385	2.75	0.90	ACCEPTED
-I am now interested in participating in climate-related events, like cleanups or awareness walks	58	122	131	74	385	2.43	0.96	REJECTED
-These campaigns have increased my willingness to support environmental causes or policies	69	147	117	52	385	2.61	0.93	ACCEPTED
Cumulative Mean						2.59		

Data on table 3 reveals that the *SustyVibes* and *PreserveOurRoots* campaigns had a moderate influence on attitudes and willingness to engage in climate action among Enugu residents.



Though many of the respondents said the campaigns encouraged eco-friendly actions, increased belief in individual impact, and heightened willingness to support environmental causes, interest in physically participating in events such as cleanups received the lowest approval. This implies that while they were influenced towards positive practices that support the environment, physical participation was an exception.

DISCUSSION

Research Question 1: What are the Messages and Storytelling Techniques Employed in *SustyVibes* and *PreserveOurRoots* Campaigns on Climate Change?

This research question is answered in the thematic analysis that explored the recurring messages and storytelling techniques used in the *SustyVibes* and *PreserveOurRoots* campaigns on climate change. The analysis showed that the main messages in the campaigns were that climate change is a public health crisis, that familiar practices that are not climate-friendly have hidden consequences, that there are safer solutions and alternatives to those practices and that there is hope that the climate change can be defeated as young people contribute actively. To pass these messages, the campaigns used storytelling techniques such as rhetorical questions and humour through funny captions and popular memes, visual storytelling and imagery, personal and community narratives and call to action phrases. This implies that youth-led campaigns on climate change not only focus on disseminating messages but creatively craft them to resonate emotionally with, and visually engage the audience. This in turn, increases the likelihood of message retention and identification.

This is in line with the findings of Abdulrahman and Okpoko (2024) who explored dominant narratives in climate communication and found the use of personal storytelling and personal narratives framed to evoke empathy, challenge mainstream frames, and induce engagement with climate issues. Similarly, Fernandez et al. (2021) for their part, found the use of relatable language and emotional positive framing in the presentation of climate messages. Presenting climate messages in a certain way using storytelling techniques is important, as it can determine the effectiveness of the message. According to the framing theory, the frame, or the angle given to a story usually determines how audiences understand and emotionally respond to them. This explains why *SustyVibes* and *PreserveOurRoots* campaigns used certain storytelling techniques that ensure message resonance with the audience.

Research Question 2: What is the level of exposure and engagement with the *SustyVibes* and *PreserveOurRoots* digital climate change campaigns?

This research question was answered using data presented in Table 1. The analysis revealed a low level of exposure and engagement with the *SustyVibes* and *PreserveOurRoots* campaigns among respondents in Enugu metropolis. Though there was some form of exposure and engagement, it was generally limited. This low exposure and engagement could be due to issues of platform visibility, algorithm limitations, or lack of targeted promotion within the audience.

This finding is corroborated by those of Nwafor et al. (2024), who examined Nigerian youths' exposure to climate change advocacy content on TikTok and found that youth engagement with



climate-related content was generally low. This shows that exposure to and engagement with a particular message often depends on more than just the content, but also platform adaptation, algorithm bias, proper promotion and presentation techniques that align with the interest of the audience. The Uses and Gratifications Theory explains media users actively seek content that meets their personal needs, such as entertainment, information, or social interaction. As revealed in the earlier finding, the *SustyVibes* and *PreserveOurRoots* campaigns used relatable language and humour, perhaps to make the message appealing to audience interests in entertainment, hence, the low exposure and engagement could be due to poor page promotion and algorithm bias. This shows that more needs to be done to make their pages more visible and garner more views and engagement.

Research Question 3: What is the influence of the *SustyVibes* and *PreserveOurRoots* campaigns on awareness of climate change issues?

The answer to this research question was provided in the analysis in Table 2, which showed that the *SustyVibes* and *PreserveOurRoots* campaigns had a moderate influence on Enugu residents' awareness of climate change. While the campaigns were not overwhelmingly influential, they were effective in improving understanding, introducing new knowledge, and helping participants understand climate issues within their everyday Nigerian experiences. This underlines the immense potential that digital youth-led storytelling campaigns can have in enhancing public awareness, particularly when the content is relatable, localized, and delivered in engaging formats.

Gómez- Casillas and Gómez-Márquez (2023) found something similar in their study. The researchers discovered a strong positive correlation between digital storytelling and climate awareness among young people in Latin America. Furthermore, the Uses and Gratifications Theory provides insight into the effectiveness digital storytelling campaigns in climate awareness, noting that individuals actively seek out content that meets their cognitive needs. In this case, the audience turned to climate storytelling to learn, connect, and make sense of the climate crisis in their own context. Thus, while the moderate influence of the campaigns on awareness as seen in this finding may be the result of the poor exposure and engagement found earlier, it demonstrates that with better visibility, such campaigns can be tremendously effective in informing people about climate change.

Research Question 4: How do the *SustyVibes* and *PreserveOurRoots* campaigns shape attitudes and willingness to participate in climate action?

The analysis on Table 3 indicates that the *SustyVibes* and *PreserveOurRoots* campaigns had moderate influence on shaping attitudes and willingness to engage in climate action among residents of Enugu Metropolis. However, while respondents said they were encouraged to adopt eco-friendly practices, felt more confident that individual actions matter, and expressed greater support for environmental causes, there was low physical participation in climate-friendly activities such as cleanup exercises. This indicates that though positive attitudes were induced, offline participation was largely not achieved.



The ability of the campaigns to shape positive attitude toward climate action aligns with what Ben- Erukora et al. (2025) found in their study. They found that campaigns which used local storytelling, trusted influencers, and solution-focused narratives had a modest impact on improving pro-climate attitudes among Nigerian youth. However, the low influence on physical participation shows that the campaigns need to focus on improving the belief of the audience in their ability to act, something that the Theory of Planned behaviour refers to this as perceived behavioural control. Campaigns such as *SustyVibes* and *PreserveOurRoots* must go beyond awareness and attitude change to inducing actual physical involvement by perhaps incentivizing participation.

CONCLUSION AND RECOMMENDATIONS

It can be concluded based on the findings, that digital storytelling campaigns like *SustyVibes* and *PreserveOurRoots* can meaningfully influence public awareness and attitudes on climate change when messages are delivered using engaging and contextually relevant techniques. The impact of such campaigns depends not just on exposure but also on how effectively the messages connect with everyday experiences, evoke reflection, and present actionable solutions. However, influencing willingness to participate in collective climate action may require more deliberate framing of physical engagement as accessible, rewarding, and socially supported.

The following recommendations have, therefore, been made:

1. Climate campaign designers should integrate humour, personal narratives, and visual storytelling in their digital content since it was found that these techniques effectively conveyed climate messages in the *SustyVibes* and *PreserveOurRoots* campaigns.
2. *SustyVibes*, *PreserveOurRoots* as a well as other climate advocacy organizations should increase campaign visibility through influencer partnerships and targeted social media ads since it was found that exposure to the campaigns was generally low.
3. Educators and environmental NGOs should incorporate locally relevant storytelling content into awareness programs since it was found that the campaigns moderately improved climate change understanding and everyday connection among residents.
4. Campaign planners should include more participatory challenges and gamified incentives in their messaging since it was found that willingness to engage in physical climate action was relatively low.



Ethical Clearance

Ethical approval for this study was obtained from all participants, who were informed that the research was conducted solely for academic purposes. Participation was voluntary, and respondents were assured of confidentiality.

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Conflict of Interest

The authors declare that there are no financial or commercial conflicts of interest that could have influenced the outcomes of this study.

Authors' Contributions

Josiah Vincent led the conceptualization and design of the study, oversaw data collection, and took primary responsibility for data analysis and manuscript preparation. Prof. Chinwe Okpoko contributed to study design, interpretation of findings, and critical revisions of the manuscript, while Dorcas Agabison assisted with data analysis and provided valuable input during manuscript drafting. All authors reviewed and approved the final manuscript and are accountable for its content and originality.

Data Availability Statement

The datasets generated and analysed during this study are available upon reasonable request.

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