Harnessing Digital Advocacy for Climate Action: Millennials' Engagement with Online Environmental Campaigns in Advancing SDGs

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Abstract: **Background:** Like most African nations, Nigeria is experiencing dire social and economic effects from climate change. These challenges are however, manageable provided climate advocacy NGOs engage in effective communication, especially with millennials. **Objective:** This study assesses the communication strategies of the International Climate Change Development Initiative (ICCDI) and examines the knowledge, attitudes, and practices of its millennial audience towards climate action. The empirical investigation employs the theory of reasoned action and planned behaviour. This study is in consonance with SDG 13 (Climate Action), SDG 11 (Sustainable Cities and Communities) in that it looks at ways leading digital advocacy extends climate awareness and sustainable urban development in Nigeria. **Methods:** The study employed a mixed research design, supplemented by qualitative analysis of ICCDI's communication methods with a cross-sectional survey of 399 purposively sampled millennials. **Findings:** Findings established that ICCDI mainly employs Twitter in interaction and also in awareness campaigns, advocacy, and interpersonal communication. Notably, of the three platforms identified to be popular among millennials, Facebook was ranked highest in providing climate change information. 61.4% claimed they did not know even basic issues, and many of them could not identify that over-flooding could have anything to do with climate change. Additionally, while 66.9% said they were willing to look for methods on how to reduce their impact on climate, a majority of them continued with negative activities, 53.9% left appliances on overnight, 52% left generators running for long periods, and many charged gadgets smartphones, laptops, and tablets. even when fully charged. When it comes to social pressure, friends were ranked as the most influential people within millennials' social circle, concerning offering directions on climate change preventive actions.

Keywords: Climate change, Climate change communication, Generation Y, Digital advocacy

1. INTRODUCTION

THERE are far worse repercussions connected to climate change than people think. As pointed out by Hoegh-Guldberg, Jacob, and Taylor (2019). Climate change poses far-reaching threats to human health, economic stability, and environmental sustainability, particularly in regions like Nigeria. Despite the growing awareness, effective communication remains a challenge, especially among younger generations who are vital to advancing climate action. Effective climate communication strategies not only drive awareness but also contribute to SDG 11 by fostering community resilience and participatory decision-making in urban sustainability. Addressing this gap is crucial for fostering a climate-smart society. The communication of climate change is an iconic enigma, especially in developing nations such as Nigeria, and brings into bear the socio-economic factors. However, it should be recognised that one of the greatest stumbling blocks for climate action is not only the absence of information but the problem itself. Global warming is a gradual process that is barely perceptible to human eyes, and hence the public always finds it a little hard to associate with; and realise its applicability to their personal lives (Koteyko, Nerlich, & Hellsten, 2015). It is, therefore, clear that there is a need to attach a lot of importance to NGOs such as ICCDI, especially in areas where sensitisation of the millennial generation is paramount, but at the same time, there is a need to give adequate credit to the local cultural attributes and incorporate them in climate communication strategies. Works of literature on the effectiveness of community engagement have established that communities are receptive to appeals that reflect their sociocultural orientation; therefore, providing a rationale for place-based communication strategies (Kahan et al. 2012).

In addition, another difficulty is created by technological access and technological literacy. rough their smartphones by accessing these social media platforms (Molyneux & Haskell, 2024). However, young people who are technologically inclined are most likely to turn to the Internet to access the information they need (Adesina, Salawu, and Adeyeye, 2024)

However, while millennials are digitally capable, not all of them have the same access to the digital assets that form the basis of modern climate narratives. To overcome this, there is a need for NGOs to integrate web-based approaches with offline approaches such as community meetings, cantonment camps, and other forms of mass mobilisation spread across remote areas or low-income communities (Moser, 2010).

Furthermore, climate change has enormous implications for the biosphere as well as the well-being of people on the planet. Climatic changes like fluctuation in temperature and precipitation patterns are likely to result in incidences of severe weather: cyclones, floods, heat waves, etc, or instances of emergence and movement of vector-borne diseases, and rodents (Hoegh-Guldberg et al., 2018). These extreme conditions increase air pollution, aggravate the accumulation of atmospheric pollutants, and also decrease agricultural yields thereby impacting negatively on economic and human productivity (Amoo et al., 2022; Meierrieks, 2021).

According to IPCC (2014), without a change in emissions, global temperature can rise between 2. 6°C to 4. Below 8°F by the year 2100 or below (-17.8°C by the year 2100). This rise is a result of enhanced greenhouse gas concentration. According to Akande, Costa, Mateu, & Henriques (2017), the regions of Northern Nigeria have observed the heat and dryness increase at the same rate as a noticeable change in the level of rainfall, while the regions in Southern Nigeria have also reported irregularities in the pattern of rainfall which may severely affect agriculture and consequently food security in all the ecological regions.

In addition, Pachauri et al (2019) noted that factors such as solar intensity, deforestation, and industrial activities, which have been blamed for global warming and climate change, inept communication is also a big problem in Nigeria (Oyero et al., 2018). Shortage of information will hamper people's awareness of risks linked to climate change, as stated by

Filho (2009). There are still some barriers to communication that remain high even with increasing scientific and public interest (Adeyeye et al., 2022; Ballantyne, 2018). These challenges directly impact the achievement of SDG 13, which emphasises urgent action to combat climate change and its impacts, as well as SDG 11, which promotes sustainable urban development.

Being independent from governments, they have taken on the task of climate communication, moving away from government-imposed limitations and clichés in search of effective long-term strategies (Yearley, 2018; Rödder, 2020). It employs educational programmes and social media to create awareness and to change the behaviour of the community, especially the vulnerable ones (McGregor et al., 2018; Vu et al., 2021). However, there is a dearth of information on how Nigerian NGOs utilise online communication in the development of knowledge, attitude, and practice (Isbäck, 2020; Wanjiru, 2018).

2. OBJECTIVES OF THE STUDY

This study investigates digital climate communication in Nigeria, contributing to SDG 13 by promoting climate action awareness and SDG 11 by fostering sustainable urban communities. The specific objectives of the study is to:

1. Ascertain ICCDI's digital communication strategies in promoting positive climate action among millennials in Nigeria.
2. To determine millennials' preferred information source on positive climate action.
3. To determine the knowledge of millennials towards ICCDI-propagated climate action.
4. To examine the attitudes of millennials towards ICCDI-propagated climate action.
5. To investigate the practice of millennials towards ICCDI-propagated climate action.
6. To investigate the influence of subjective norms on millennials' behavioural intention towards climate change prevention.

3. THEORETICAL FRAMEWORK

The theoretical underpinning applied in the study was the Theory of Reasoned Action (TRA), which was developed by Martin Fishbein and Icek Ajzen in 1975. According to TRA, behavioural intentions depend on the perceived attitudes toward the behaviour and perceived subjective norms. In other words, people use certain behaviours due to their beliefs about the consequences and the roles of other people in their community. Intention being the epitome of the theory is also emphasised as the major determinant of behaviour. Thus, the findings reflect that millennials' perception of climate change and social norms common among peers and families influence their ability to adopt climate-friendly behaviours.

Through the use of TRA, the study establishes that elements of communication associated with ICCDI and the influence of one's friends and families affect the millennials' perceived attitude and behavioural control towards climate change, thus providing recommendations on how future advocacy on climate change can be effective. The Theory of Reasoned Action aligns with SDG 13 by influencing individual behaviours contributing to climate resilience and sustainability. The application of the theory to the findings from this study is further expounded in the discussion section of the paper.

4 MATERIALS AND METHODS

Research Design

The descriptive and explanatory approaches were combined within a mixed research design for this study. It incorporated both the quantitative questionnaires and the qualitative in-depth interviews, making it easy to establish the extent to which the millennials understood ICCDI's climate communication.

Population of the study

The population comprised two categories: for the qualitative approach, ICCDI was chosen because it was established as Africa's first Twitter weekly conversation starter about

climate change, as stated by Njoku in 2019. For the quantitative approach, the population contained the ICCDI's online viewers, which cannot be determined in advance since they are unlimited.

Sample size

This study used Glenn's (1992) formula for computing the sample size to arrive at a sample size of 399 respondents at a 95% confidence level and 0. 05 error terms.

Sampling Technique

The technique for both methods was purposive sampling. This technique was used in selecting the interviewees who were the CEO and the Podcast lead of ICCDI. The CEO and the Podcast lead of ICCDI were purposively selected based on their knowledge of the NGO and its mission, and also their responsibility in managing the communication techniques of the organization. The strength of this method was in its ability to identify or select individuals with specific characteristics who have the potential to provide detailed and reliable information for the study. The technique for the quantitative method of survey was purposive sampling because the selected sample was the audience that had been exposed to the communication messages of the NGO.

4. Data Analysis

To accomplish the aims of the study, the survey was evaluated with descriptive statistics, which encompassed the use of frequency distribution tables and percentages, while the qualitative responses were analysed using Yin's (1984) thematic analysis technique. The answers of interviewees were transcribed, while only the most impactful information and statements necessary were presented in order to avoid redundancy and repetition.

ETHICAL CONSIDERATION

Ethical consideration was strictly taken into cognisance to ensure respondents' informed consent, confidentiality, and the right to withdraw from the study at any time.

4 Qualitative Data Presentation of Results

Excerpts from In-depth Interview

Responses from the interview were categorised under six themes. They include:

ICCDI's Communication Strategies: It was deduced that the NGO actively uses multiple social media platforms, including Twitter, Instagram, Facebook, and Medium, but Twitter has proven to be the most effective since it is conversational and a majority of its audience are millennials. Below is one of the excerpts from the interview.

Response from the Podcast lead,

> *"ICCDI is present on all platforms, and we try to communicate actively on each platform, ranging from Instagram to Twitter, to Medium, and Facebook. But these platforms vary…primarily Twitter has been the most effective platform or channel for ICCDI."* **(Male, Podcast lead, Lagos)**

Twitter Engagement: responses in this regard show that ICCDI not only uses Twitter for sharing climate information but for participating in climate discussions as well. The role of the platform is to transfer knowledge and participate in discussions with the millennial audience.

> *"Twitter is the strongest channel because the majority of our audience is on Twitter, and the initial generation of the organisation started from Twitter. We use this platform not only to engage the young people but to transfer knowledge to people on climate issues."* **(Male, CEO, ICCDI, Lagos)**

The statement of the CEO of the International Climate Change Development Initiative was further corroborated by the Podcast lead, who stated that:

> *"Twitter has been the most effective platform or channel for ICCDI because of the follower base and amount of engagement. The millennial audience views Twitter as the platform for intense conversation, and we've been*

leveraging that to get them to understand issues around climate change." **(Male, Podcast lead, ICCDI, Lagos).**

Raising Awareness: The NGO employs both online and interpersonal communication to increase awareness of climate change issues and regularly collaborates with other organisations, such as the National Orientation Agency, to disseminate their message to as many communities as possible.

Excerpt:

The CEO mentioned;

"What ICCDI aims to do since it started on social media is to raise awareness on environment-related issues" **(Male, CEO, ICCDI, Lagos)**

The CEO further stated that the NGO raises awareness on climate change to those in the grassroots by using the government and government agencies, as seen below

"Partnering with the government is also strategic because we need to pass information, so we pass through the National Orientation Agency and engage in government visitation to understand community problems and why we need to make changes." **(Male, CEO, ICCDI, Lagos)**

Educational Initiatives: Speaking of Climate Wednesday on Twitter, ICCDI enhances awareness among online and grassroots communities on climate change by holding such events and also holding community workshops that involve explaining climate change issues and offering community solutions, as reflected in the excerpt below.

"We go to the grassroots and inform the community leaders about the issues they are facing in relation to climate change and the solutions that are available." **(Male, Podcast lead, ICCDI, Lagos)**

The climate action NGO also educates the young audience in the online space with the use of their climate conversation platform, Climate Wednesday.

A statement by the CEO emphasises this:

"We have a platform called Climate Wednesday that happens every Wednesday on Twitter at 6 pm Nigerian time. This is the channel used to engage the online audience. It is educative, collaborative, and it aids in building a climate-smart generation." **(Male, CEO, ICCDI, Lagos).**

Advocacy and Grassroots Engagement: Related to advocacy, the study deduced that ICCDI works with small stakeholders and young people living in grassroots communities to help them innovate climate solutions in programs such as the Youth Climate Innovation Hub.

Excerpt from the Podcast lead of ICCDI:

"We are primarily advocacy-based, we do a bit of training for more people to understand how to communicate climate change and think of innovative solutions to the issue of climate change." **(Male, Podcast lead, ICCDI, Lagos)**

Further response from key informants in respect to advocacy and grassroots engagement has this to say:

"ICCDI also engages in training young people… One of these includes: Youth climate innovation hub funded by UNDG in 2019, young people came together to think about innovative solutions to the issue of climate change that is affecting their local communities at the time" **(Male, Podcast lead, ICCDI, Lagos)**

Influencer Partnerships: Response in this regard implies that through participating in climactic conversations on their platform as well as partnering with key players in the fight against climate change, ICCDI can amplify climate advocacy by encouraging users to retweet shared content.

Interpersonal Communication: Responses show that in addition to the web-based approach, the NGO often uses a face-to-face style of working by holding live workshops or community meetings. This is reflected in the excerpt below:

> *"Outside of social media, there is a lot of work that goes into engaging the members of the local areas by giving them education on these environmental changes they are experiencing. Social media is not a primary source for communicating climate change to the people of the local areas."* **(Male, Podcast lead, ICCDI, Lagos)**

The CEO made a statement that further corroborated what the Podcast lead said during the interview.

> *"We communicate with the use of different media, we make use of social media, IEC material, and focus group discussion that helps us understand the audience and the root causes and how we can proffer solutions to it."* **(Male, CEO, ICCDI, Lagos)**

Figure 1: Illustration of a non-governmental organisation's communication strategies on climate change.

5. Interpretation of Illustration on NGOs' Communication Strategies

Although it is a truism that the media play an indispensable role in the dissemination of information, as posited by Oyesomi (2011). However, ICCDI communicates climate change through two main channels: interpersonal and computer-mediated. Interpersonal communication is one that involves direct and immediate contact with the targeted audience, and this aims at creating awareness, persuading, and educating the targeted people. Social media, incorporating the use of Twitter, Instagram, Facebook, and Medium, mainly focuses on the intensity and campaigning approaches to encourage climate change. Whichever form of communication it is, the fact remains that communication is a necessity in the world that we live in (Adesina, Salawu & Adeyeye, 2024).

Quantitative Data Presentation of Results

Table 1: Details of the respondent's background information

Demographic Characteristics	Frequency (N)	Percentage (%)
Sex of the respondents		
Male	229	54.7
Female	170	42.6
Total	**399**	**100**
Age brackets of the respondents		
26-29 years	102	25.6
30-33 years	77	19.3
34-37	135	33.8
38-41	85	21.3
Total	**399**	**100**
Educational qualification of the respondents		
Primary	43	10.7
Secondary JSS	51	12.7
Secondary SSS	174	43.6
Tertiary	131	33.0
Total	**399**	**100**
Employment status of the respondents		
Student	180	45
Entrepreneur	52	13
Career person	97	24
Industrial worker	70	18
Unemployed	Nil	0
Total	**399**	**100**

Field Survey 2024

Summary of Demographic Details of Respondents

The study involved 399 participants, most of whom were between 26 and 41 years old, known as the millennials, with a slight male dominance of 57.4%. a considerable proportion of the sample are students, who constitute 45%, career persons are 24% of the population, and only 18% are industrial workers. Majority of the respondents are well-educated. 43.6% possessed higher education, while 33.0% possessed postgraduate degrees. This group of educated and professionally active persons is the primary target audience for climate change messages delivered by NGOs.

6. Descriptive Statistics

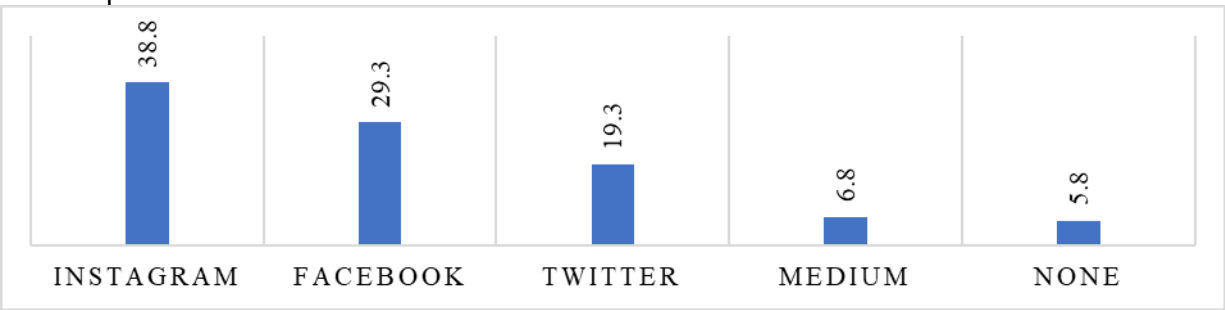

Figure 2: The most reliable online information source for climate change

It was in the researcher's interest to find out the social media platforms millennials use for climate change information. In terms of the credibility of the source, Instagram was established to be the most credible source of information (38.6%), followed by Facebook (29.3%), and lastly Twitter (19.3%). These are some of the social media platforms that people frequently use, this implies that NGOs should opt for these media in communicating climate change for better results.

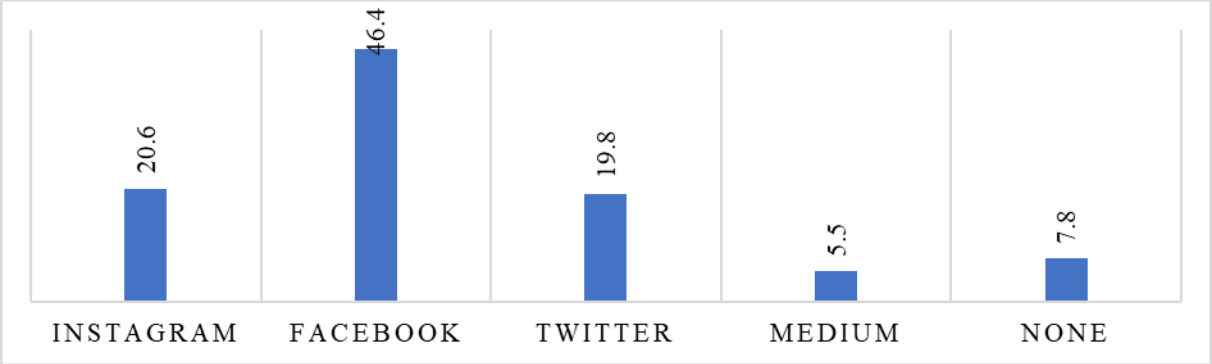

Figure 3 Predominant sources of information on educative and informative content on climate change

Facebook was the most cited platform from which people got their climate change education (46.4%), followed by Instagram and Twitter (20.6% each). This distribution reflects millennials' preferences for diverse content formats: The vast sharing capabilities of Facebook, the visually appealing feature of Instagram, and the conversational feature of Twitter. NGOs should take advantage of these platforms and the advantages they have in climate change communication, as posited by Ali (2011)

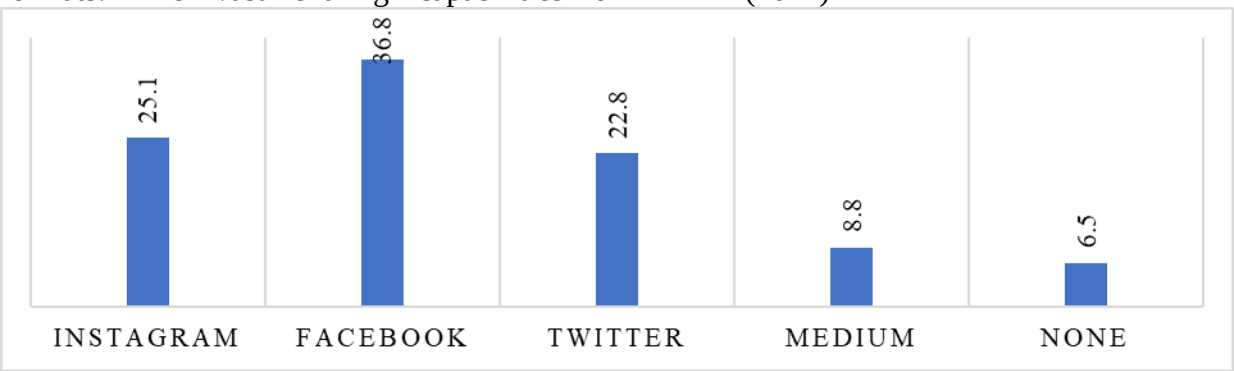

Figure 4: Climate change information is mostly used

The study had a concern about how often respondents would normally come across climate change information, and more on, any of the listed sources of information. This brought an understanding that the majority of the respondents composed of 36.8%, stated that they often come across climate change information on Facebook, which is the platform that the older generations of millennials use most. Second was Instagram, which made up 25.1% of the respondents, and 22.8% said they rarely use Twitter. While only 8.8% said it was Medium, this may be attributed to the respondent's inclination to read since Medium is a platform for reading educational and informative articles.

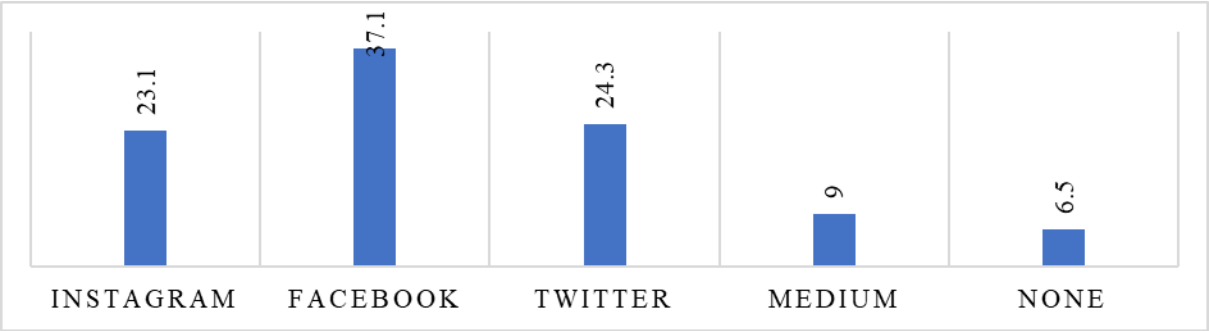

Figure 5: I pay attention to content relating to the environment better

Figure 5 shows which of the information sources respondents pay attention to content relating to the environment better. It was discovered that most of the respondents went for Facebook, which accounted for 37.1%, as this may be because respondents prefer Facebook because content relating to the environment on Facebook may come in video or image form, as well as text to support it. It was discovered that 24.3% of the respondents pay attention to content relating to the environment better on Twitter, maybe because of the opinionated and interactive nature of Twitter content and Instagram, which accounted for 23.1%, respondents may pay attention to content on Instagram because of the use of images and videos while 9% of the respondents pay attention to content relating to the environment on Medium maybe because medium content is more explanatory as it consists of a lot of text and some images.

Table 5: Millennials' knowledge of Climate Action

S/N	ITEMS	SA	A	D	SD	Mean	SD
Item1	Overflooding cannot be attributed to climate change	19.3%	42.1%	34.6%	4.0%	1.85	.869
Item2	Carbon monoxide from industrial cars and factories does not affect the Earth's climate	27.3%	25.6%	36.6%	10.5%	2.23	.949
Item3	Gas cookers are not a threat to the environment	28.6%	34.6%	29.8%	7.0%	2.08	.953

To measure the level of knowledge of climate action among the millennials, three focal items were employed. 61.45%, which comprised 19.35% strongly agreed and 42.1% agreed, are of the opinion that over-flooding couldn't be attributed to climate change. This is a result of a low education level. Conversely, 38.6% disagreed or strongly disagreed with the influence of their professions. Regarding the effects of cars and factories producing carbon monoxide, 52.9% (27.3% strongly agreed, while 25.6% agreed) said that it does not have an influence on the climate. While 47.1% said no or strongly disagreed, those working in the industrial areas were more informed of the risks.

Regarding gas cookers, 63.2% (28.6% strongly agreed, 34.6% agreed) felt that their

products did not harm the environment because they had minimal experience in that area, while 36.8% disagreed or strongly disagreed, probably more aware of such threats to the environment. In general, misconceptions about climate impacts were evident across the group.

Table 6: Attitudes of Millennials Towards Climate Action

S/N	ITEMS	SA	A	D	SD	Mean	SD
Item1	I am willing to engage in tree planting to help remove carbon dioxide from the air and release oxygen into the atmosphere.	23.6%	27.6%	42.9%	6.0%	2.08	.864
Item2	I am willing to make use of hot plates and electric kettles in the kitchen to reduce the rate of burning fossil fuels.	30.6%	34.6%	27.1%	7.8%	2.12	.975
Item3	I am willing to search for more information on climate change online to find out how I can reduce my carbon footprint.	28.8%	38.1%	24.3%	8.8%	2.08	1.008

The survey was based on three items to capture millennials' perception of ICCDI-promoted climate action. Regarding tree planting, 51.2% (23.6% strongly agreed and 27.6% agreed) showed the readiness to participate. 48.9% said no; this could be because of their working responsibilities. In giving an indication of its efforts to minimize the consumption of fossil fuel through the use of hot plates and electric kettles, 65.2% (30.6% strongly agreed, 34.6% agreed) were willing, probably due to the fact that many could own them. 34.9% disagreed; this could be a result of financial setbacks.

Lastly, 66.9% (28.8% strongly agreed, 38.1% agreed) stated that they were willing to look for information on how to lower their carbon footprint on the Internet, which was associated with higher education levels. Another 33.1% disagreed, probably because of their low level of education.

Table 7: Practice of Millennials Toward Climate Action

S/N	ITEMS	SA	A	D	SD	Mean	SD
Item1	I dispose of food I cannot consume completely.	18.0%	53.6%	20.6%	7.8%	1.80	1.002
Item2	I leave my appliances on overnight and my generator running for a long time.	23.6%	30.3%	38.8%	7.3%	2.08	.915

Item3	I leave my gadgets (smartphones, laptops, tablets) charging even when it is full.	21.4%	30.6%	34.6%	10.8%	2.15	.984
Item4	I drive to wherever I need to be every day to avoid the discomfort of public transport.	26.1%	27.3%	29.6%	17.1%	2.33	1.059

Millennials' climate action practices were tested through four key areas as propagated by ICCDI. 71 6% (18% for strongly agree and 53.6% agree) threw away food that they could not consume because they were not aware of the connection between waste management and climate change. 53.9% (23.6% strongly agreed, 30.3% agreed) left appliances on overnight, probably because they did not know the importance of energy saving. Similarly, 52% (21.4% strongly agreed while 30.6% agreed) admitted to leaving gadgets charging even when full, indicating that they lacked adequate knowledge on energy conservation, and 48% disagreed. 53.4% (26.1% strongly agreed, 27.3% agreed) stated they drove daily to avoid public transport, perhaps due to job requirements. 46.6% disagreed due to concerns about the use of fossil fuels or financial implications.

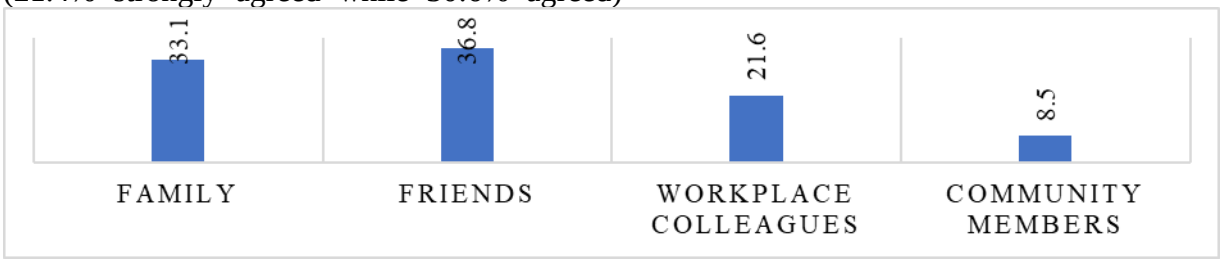

Figure 6: The most important person in your social network whom you look up to in carrying out climate change preventive measures

Figure 6 depicts the key respondents' social network influencing them on climate change preventive measures. Analysis of the data obtained shows that 36.8% of respondents understand friends as their key source; the majority of the respondents are young students. Family was considered important according to 33.1% of respondents, and 21.6% of those older respondents, cited colleagues as key influencers, which is an indication that working relationships may help shape professionals in workplace-dependent careers. 8.5% regard community members as very influential players. In conclusion, this study finds that friends strongly influence millennials' attitudes towards climate change prevention behaviour intention.

Figure 7: The most important person in your social network from whom you think you should carry out expected climate change preventive actions

In Figure 7, the study identified the social groups that have the most impact on climate change preventive actions. 43.9% of respondents consider family as the most important group hence, family men and women may use this answer to influence their households' actions. 26.1% think that friends are persuasive, especially in the generic group of young millennials. 18.3% as expected, believe that colleagues do matter for the obvious reason of career-oriented respondents. Lastly, 11.8% of the respondents believe that the community members are equally significant. From the responses, it can be concluded that family is the most important social reference enhancing climate preventive measures among the respondents' social networks.

Discussion of Findings.

Findings showed that ICCDI employs different communication intervention measures, such as the use of Twitter, interpersonal communication, and advocacy, to foster climate action among millennials. As per the CEO of ICCDI and the Podcast lead, an analysis indicates that Twitter is the most effective platform.

Dai, Zeng, & Wang (2017) speak in parallel with this finding by asserting that social media is an important tool for campaigns and volunteer mobilisation for NGOs. Consulting millennials through digital platforms aligns with the general NGO practice in the world today. Duong (2017) also points out that NGOs rely on advocacy procedures to educate the public; thus, backing ICCDI's strategies that focus on online and offline awareness campaigns. Millennials' engagement with climate content on digital platforms plays a crucial role in advancing SDG 13 by promoting climate-conscious behaviours and SDG 11 by encouraging sustainable urban policies.

Few scholars hold contrary opinions to this finding, For instance, According to Filho (2009), there are barriers to communicating climate change but ICCDI does not seem to have such barriers primarily because social media is interactive; Digital tools allow for quicker reactions and decentralized campaigns as explained by Hall, Schmitz & Dedmon (2020) This finding corresponds to the Theory of Reasoned Action, which is based on the assumption that attitudes and perceived behavioural control are affected by different kinds of communication, with which ICCDI reached millennials.

As earlier illustrated in Fig. 2, most respondents regarded Instagram as the most credible channel, followed by Facebook and Twitter. This meant that educational content dominantly came from Facebook. This finding is in line with Koteyko, Nerlich, & Hellsten (2015). They note that the Internet is not only a social networking site but also a news provider, implying that Instagram and Facebook are the two sites most used for sharing climate action information. Also, Newell & Dale (2015) prove that Facebook can be used for sharing information on climate innovations, which matches the results of this study regarding the fact that the audience of ICCDI uses Facebook actively.

Like Vu et al (2021), this study found that Facebook is used more to spur climate action, and also, millennials are more inclined than other age groups toward the content shared in their Facebook news feed, particularly if it is related to the environment. This finding aligns with the Theory of Planned Behaviour in terms of post-secondary millennials, for it reveals that subjective norms (which are peers through platforms like Instagram and Facebook) influence the behavioural intention towards climate action.

Findings showed that some of the interviewees questioned basic realities, for example, who knew that climate change was a cause for such over-flooding, or that carbon monoxide was a problem to the environment. According to Oyero et al. (2018), this paper discovered that flooding is associated with climate change, and that, therefore, millennials may need to be educated on climate change, as is advocated by Mahl et al. (2020), who concur that the general public still has a hard time comprehending climate change. Ricart, Olcina, & Rico (2019) note that one of the reasons that people are still in the dark about climate change is that they do not know about it.

However, these findings conflict with McGregor, Yerbury, & Shahid (2018), who opine that NGOs, by and large, accomplish altering comprehension, implying that ICCDI should improve its public relations strategies. This gap could become problematic for ICCDI in attaining the theory's behavioural intention component since low knowledge impacts attitudes and intentions about engaging in climate-beneficial behaviours.

Findings from objective four showed that although some respondents agreed to perform positive actions such as planting trees and using hot plates most of the respondents did not. In line with this finding, researchers Kirkpatrick, Davison & Daniels (2012) discovered that half of the respondents agreed to participate in the tree planting process, which provides evidence to support the view that environmental behaviours may be changed with the help of education. Similarly, Okeke (2019) knowledge-seeking is linked to attitudes, thus supporting the concept that enhanced consciousness results in better climate change attitudes and behaviour.

The study ties with Corner et al. (2015) to determine that the youthful population has a higher level of concern about climate change, although this research discusses the variable of millennials' views on climate change. The conclusion from this finding only partially confirms the Theory of Planned Behaviour, since some millennials have the ''intention'' to act in a climate-smart way, but attitudes typically need to be even more significantly adjusted to fit the given theory.

Findings revealed that a high number of millennials exhibit anti-climate conduct like leaving appliances on overnight, or using automobile transport to avoid using public transport. Boto-Boto-García and Bucciol (2020) note that energy overconsumption is one of the major sources of greenhouse gas emissions, hence supporting the study's conclusion that energy inefficiency is rife among the respondents. Eneh and Oluigbo (2012) talked about the effect of carbon emissions from transportation, which supports the view that millennials prefer to drive their cars rather than use public transport.

The finding differs from the investigation by Masud et al. (2016) that individuals are capable of changing others and adopting climate-friendly behaviour. The high level of negative practices revealed in this study calls for the need for better peer pressure or communication norms. The practice findings indicate that the issue arises from the "behavioural control" component of the Theory of Planned Behaviour, in which many Millennials are unable to muster the perceived control required to alter behaviours even when aware of the pitfalls.

The findings showed that millennia friends had the greatest impact on their climate behaviours, with family and colleagues coming second. Following the same idea, Masud et al. (2016) strongly support the importance of social influence in promoting and maintaining climate-damaging/protecting behaviour where the present study also reveals that the subjective norms has significant impacts on climate behaviour focusing on friends and family. Subjective norms were first used in the original TPB by Azjen (1980), and they can be seen to support the contention that social factors do influence behaviour. Again, this finding is consistent with the Theory of planned behaviour, this shows that subjective norms are one of the most convincing factors influencing the millennial's perceived behavioural intentions towards Climate preventive behaviours.

Conclusion

The issue of climate change has often been overlooked in recent years, especially in African countries. Considering the objective of SDG 13, the fight against climate change, and government agendas to achieve a carbon-free society, effective communication of climate preventive measures would aid in the fight against climate change. Through digital climate advocacy, this study supports SDG 13's goal of climate resilience and SDG 11's vision for inclusive and sustainable cities. The findings from this study reveal that the NGOs' climate change communication techniques include: the use of Twitter, raising awareness, educating, the use of advocacy, and the use of interpersonal communication.

The study concludes that the audience of the NGO has little knowledge of climate change but is willing to engage in positive climate action practices. Hence, this can be changed by active communication of climate change by climate action non-governmental organisations, and the use of communication strategies that appeal to their audience. Though online communication is effective for communicating climate change, it cannot stand alone as a means of communicating climate change to millennials.

Recommendation

The study provided actionable framework that provides a clearer direction for ICCDI to better address millennials to act on climate as well as links

its work to the global SDGs, both locally and internationally. They include:

1. Leverage on the strengths of each platform; Instagram for photos and visuals, Facebook for discussions, and twitter for real time climate issues.

2. Partner with ambassadors by designing a formal ambassador initiative that supplies these climate advocates with climate messaging materials, as well as fostering them to spread climate messages in their households and on social media.

3. Climb up the ladder by employing social media climate awareness drives and workshops on a recurrent basis in rural areas and nearby less privation climate educational resources in vernacular for a better understanding.

4. Encourage sustainable behaviours by hosting social media challenges related to climate change; content focused on reward for frequency and relevance will be most effective.

5. Target your content according to target audiences, which can be students, professionals, or entrepreneurs, to deliver custom content that can resonate with their desire to act on climate change.

6. Animate advocacy through coming up with particularistic calls to action tied to more general ambitions such as the United Nations' Sustainability Development Goals, including Climate Action (SDG 13), Clean Energy (SDG 7), and Sustainable Communities (SDG 11), and reiterating the link during workshops and campaigns.

7. Convene a collaborative network of governmental and non-governmental organizations, enabling a systemic level of climate communication that is regional, and to actively support policy/implementation in public relations.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The authors equally contributed to the present research, at all stages from the formulation of the problem to the final findings and solution.