

Influence of mass media reports on public perception of climate change issues in Nigeria and Ghana

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Abstract

This study sought to assess the exposure to, and perception of, climate change—as reported by the media—among residents of Lagos, Nigeria, and Accra, Ghana. It employed primary data obtained from a total of 500 respondents. A questionnaire was used as the instrument for data collection, while the student T-test and Mann Whitney U test were employed to analyze the results. The study revealed that there exist significant differences in exposure to media messages on climate change in Lagos and Accra. Further, the results of the Mann–Whitney U test revealed that, overall, there were significant differences in how respondents from Nigeria and Ghana perceived news media coverage of climate change at the 0.05 significance level. The study concluded that there is an urgent need for improved climate change education through media outlets in Nigeria and Ghana.

Keywords: Climate Change Perception, African media, Lagos, Accra

Introduction

Climate change is a cross-cutting issue that affects all disciplines, as it poses serious threats to human lives and livelihoods. It impacts the environment, which in turn influences human activity and contributes to a decline in living standards and quality of life (Centre for Social Justice, CSJ, 2016; Ajaero, Mozie & Abu, 2018). Climate change as defined by the United Nations Framework Convention on Climate Change (UNFCCC) refers to a change in the climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which, in addition to natural climate variability can be observed over a comparable period (UNFCCC, 1992). According to the Intergovernmental Panel on Climate Change, IPCC (2023), there is clear evidence that human activity has warmed the atmosphere, ocean, and land. In 2024, the Emergency Events Database (EM-DAT) of the Centre for Research on the Epidemiology of Disasters (CRED) recorded 393 natural hazard-related disasters. In Africa, floods had caused the highest number of fatalities with severe droughts affecting over 25 million people in several countries (CRED, 2025). Climate change poses a challenge to countries across the world, with the news media being an important source of information

on the issue (Hase, et. al., 2021). Since it has to do with a change in weather patterns over a certain period, Pasquare and Oppizzi (2012) assert that the way climate change and its reportage by the media are perceived by the public will depend on social processes of knowledge construction.

International political response to climate change began at the 1992 Rio Earth Summit, which led to the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) as part of the "Rio Conventions". Since then, there have been several agreements on how to stabilize atmospheric concentrations of Greenhouse Gases (GHGs) as well as strengthen adaptation. Consequently, rapid and far-reaching transitions across all sectors and systems are necessary to achieve deep and sustained emission reductions and secure a livable and sustainable future for all (IPCC, 2023). Global efforts towards combating the effects of climate change gave rise to the Sustainable Development Goals (SDGs) of the United Nations, developed out of the Millennium Development Goals (MDGs), and adopted in 2015. According to the United Nations Development Programme, UNDP (2017), the 17 SDGs build on the successes of the MDGs, while including new areas such as climate change, economic inequality, innovation,

sustainable consumption, peace and justice, among other priorities. Although Goal 13 specifically calls for action towards climate change, climate change impacts were still projected to slow down economic growth, make poverty reduction more difficult, further erode food security, prolong existing and create new poverty traps, throughout the 21st century (IPCC, 2014).

Climate Change is perhaps the most serious environmental threat to the fight against hunger, malnutrition, diseases and poverty in Africa, mainly through its impacts on agricultural productivity (Fawole & Olajide, 2012). It threatens to reverse many of the developmental gains that African nations have made, as it poses threats to food and water security, political and economic stability, as well as livelihoods and landscapes (UNESCO, 2013). Climate change affects people everywhere, while disproportionately harming the poorest and the most vulnerable, thereby bringing to the fore the urgent need for concerted action to stem it and curtail its ever-increasing hazards (United Nations, 2017).

Remarkably, although climate change is a global problem, developing countries are often more vulnerable to its impacts due to factors like poverty, illiteracy, and low public awareness (Thakar, Zhao & Leiserowitz, 2017).

The media play a central role in informing the public about what happens in the world, particularly in areas where their audiences do not possess direct knowledge or experience (Happer & Philo, 2013). Information is fundamental to knowledge, and informed and knowledgeable citizens are empowered to participate in civic affairs, social development and progress (Khaskuu, 2015). Hence, the media play an essential role in the construction of social reality and consequently, knowledge of what is reported in the media is essential to understanding significant issues such as climate change (Mercado, 2012). Thus, the current study aims to explore how Nigerian and South African media influence the perception of climate change by their audience in Lagos and Accra through the construction of news reports.

Lagos state is adjudged the second most populous state in Nigeria, after Kano, with over 20million people, as recorded in the Nigerian 2006 Census. It is a coastal city which was once the capital of Nigeria before it was moved to Abuja in 1993. Lagos is located in the Southwest geopolitical zone of the country and is highly vulnerable to the effects of severe weather and climate, with its low-lying coastal location and an average elevation of less than 1.5meters (Stark et.al, 2013).

Accra, on the other hand, is the capital of Ghana, a coastal city and the second most populous region in the country, after the Ashanti region. The geomorphology of Accra makes it extremely susceptible to flooding as the sea level rise along Ghana's coast is estimated at 2.1mm per year over the last 40 years and is expected to increase (Stark et.al, 2013). Both cities have experienced and are still experiencing the effects of climate change.

Hypotheses

H_1 : There is no significant difference between Lagos and Accra residents' exposure to climate change coverage by the different media outlets.

H_2 : There is no significant difference between Lagos and Accra residents' perception of climate change as reported by different media outlets.

Literature Review

Public understanding of climate change

There is an overwhelming consensus by climate scientists that humans' emissions of greenhouse gases are the dominant drivers of climate change (Anderegg & Goldsmith, 2014; Rice, 2010). However, a substantial segment of the public remains skeptical towards this conclusion on climate change (Anderegg, et. al., 2014). The terms, 'global warming' and 'climate

change' are often used interchangeably by researchers which has been proven to influence public understanding of climate change (Whitmarsh, 2009). However, Cordero et al., (2008) conclude that people seem to connect global warming only with visible pollution and not indirect emissions. The relationship between the two terms is that global warming like climate change increases the occurrence of extreme weather events, including flooding and droughts (Bello et al., 2020). Whitmarsh (2009) found that global warming was the most used terminology than climate change, while Anderegg, et. al., (2014) conclude that the public primarily conceives of, and thinks about climate change in terms of 'global warming' rather than 'climate change'.

While scientific evidence on the human agency of climate change seems compelling, public conviction and capacity to adapt to and adopt mitigation measures remain tentative among developing countries and poor populations (Gadzekpo et al., 2018). Studies (e.g., Ajaero et al., 2018; Batta et al., 2013; Urcan, 2012; Nzeadibe et al., 2011; Babalola et al., 2010; BBC, 2008) have shown that climate change poses a serious threat to human existence, but it attracts low public interest and is insufficiently covered by the media

(Kakonge, 2012). Understanding public perception is important for developing educational contents, guiding the development of persuasive messages, and identifying anticipated responses to policy proposals (Chadwick, 2017).

Media influence on public perception of climate change

The media are the most important means by which people obtain scientific information (Rahmstorf, 2012). Hence, media coverage exerts an important influence on how the public perceives climate change (Bruelle et al., 2012). Informing the public about the causes and impacts of climate change is widely regarded as a basic prerequisite for informed public decision-making and democratic participation on the topic (Whitmarsh, 2009). Communication scholars and practitioners play a role in describing, predicting, and affecting how we communicate about climate change (Chadwick, 2017). However, Dupar et al. (2019) contend that communicating about climate change has its own unique challenge, which cuts across the use of scientific jargon to represent climate impacts simply and faithfully, to making conversations about climate solutions inclusive and accessible. That is why it has been established that the way the media frames issues can influence public perception towards them. This framing

can be thematic (climate change discussed as a recurring issue) or episodic (climate change discussed as an isolated issue). Hart (2010) found that participants who were exposed to a thematic frame had more support for policies that address climate change than participants exposed to an episodic frame. Also, several scholars have conducted researches in the different aspects of persuasive communication and perception to understand the influence wielded by the media in shaping peoples' perception on aspects of human life (Hayes, 2011; Miller, 2007; Sadif, 2011; Gore, Siemer, Shanahan, Schuefele & Decker, 2010).

Research in climate change communication focuses mainly on public understanding of climate change, factors that affect public understanding, media coverage and framing, media effects and risk perceptions (Chadwick, 2017). Scholars have conducted studies to ascertain audience perception of climate change as framed by the media (e.g., Pasquare et. al., 2012; Kirilenko, Molodtsova & Stepchenkova, 2015; Jang & Hart, 2015; Griffin, 2017; Anderson, 2017; Bojovic & Dooel, 2014; The Asia Foundation, 2012; Toan, Kien, Giang, Minh & Wright, 2014; Thakar, et. al., 2017; Capstick & Pidgeon, 2014; Capstick, Whitmarsh, Pooringa, Pidgeon &

Upham, 2015; Feldman, et. al., 2010; Leiserowitz, 2007; Lorenzoni, et. al., 2006); media coverage and framing of climate change (Feldman, et. al., 2012; Dreher & Voyer, 2015; Doulton et al., 2009; Boykoff & Mansfield, 2008; Boykoff & Boykoff, 2007; Antilla, 2005); climate change and health (Cardwell & Elliott, 2013; Portier, et. al., 2010; Villagran, et. al., 2010); climate change film productions (Beattie, et. al., 2011; Hart & Leiserowitz, 2009), and social media representation of climate change (Jang & Hart, 2015; Kirilenko & Stepchenkova, 2014; Uldam & Askanius, 2013). These studies were conducted in different countries in Europe, Canada, UK and the United States of America. There is a gap in the expansion of the climate change communication research to other regions, particularly developing countries (Chadwick, 2017).

van Valkengoed et al.'s (2022) survey study of the Netherlands ($n = 3,546$) and the UK ($n = 803$) revealed that the more people perceive climate change as real, human-caused, and having negative consequences, the more likely they are to support adaptation policy and to seek information about local climate impacts and ways to adapt. Similarly, surveying 488 respondents in Southwestern China, a region prone to frequent and severe droughts, Deng et al. (2017) found that a

concrete perception of water conservation plays a more significant role than an abstract perception of climate change, in prompting specific adaptive behaviours. This can be attributed to the fact that personal experiences of the respondents affected their perception of climate change. Echoing this thought, Ruiz et al. (2020) concluded that perceptions are directly influenced by the level of principles and ideals within a community and by the physical experience of weather change. Furthermore, Thaker (2023), using data from the 2022 Yale Meta survey of 108,946 Facebook monthly active users from 110 countries and territories, found that people in countries most exposed to climate-related impacts were more likely to show heightened perceptions of harm to self and future generations. The study, however, concluded that media coverage is not related to perceived personal or future risks.

Also, despite low media coverage of climate change, citizens in poor and developing countries see climate change as a greater risk and are more willing to participate in protesting against it compared to citizens in developed countries. This suggests that climate change perceptions can have an important influence on adaptation.

behaviours, especially policy support and information seeking. However, it may be necessary to address additional barriers to full understanding of the potential of climate change perceptions in promoting a widespread adaptation behaviour (van Valkengoed et.al., 2022). Yet as revealed by Okoliko and Petrus de Wit (2020), there is a bleak picture of the understanding of the impact of media communication in engaging climate change issues, especially in Africa.

Climate change coverage/framing in Africa

For African nations and people to seize available opportunities to reduce the risks of climate change, everyone needs to know more about it (UNESCO, 2013); and mass media's portrayals of climate change related predicaments and developments remain key influences that shape discourses and lead to considerations for possible climate mitigation and adaptation actions (Boykoff, 2010, p.17). The ways we communicate, powerfully affect our perceptions of the living world; which in turn, help shape how we define our relations with and within nature and how we act towards nature (Milstein, 2009)

Africa is made up of developing nations vulnerable to climate change issues which have remained poorly understood,

partly because of the prevailing structural and capacity weaknesses of the media sector in the continent (Kakonge, 2012). Media reports on climate change in many sub-Saharan African countries are event-driven with little or no attempt to link local events to the larger climate change discourse (Ajaero & Anorue, 2018; Kakonge, 2012; Tagbo, 2010). Scholars have focused on the assessment of African media coverage and framing of climate change (e.g., Ajaero et al., 2024; Shimhanda & Vivian, 2022; Mwali et. al., 2021; Nwabueze & Egbra, 2016; Nwabueze et. al., 2015; Ukonu et. al., 2012; Fahn, 2009; Kayula, 2009; Okomo-Okello, 2009; Fawode et. al., 2007, Cramer, 2008), and also on the factors that influence editors' coverage of climate change (e.g., Tagbo, 2010; Ajaero, et. al, 2018). However, Fahn (2009) asserts that the challenge of reporting climate change in Nigeria is disconcerting due to the prevalent widespread illiteracy levels among the populace which require climate change messages to be localized and communicated in vernacular.

According to Milfont (2010), natural disasters caused by changes in global climate are underestimated because of their low frequency of occurrence and yet familiar nature. Irrespective of the impacts of climate change on livelihoods, the vast majority of humans are doing

very little, if anything at all, to alter their daily habits that affects the occurrence as the change feels somehow unreal (Giddens, 2009). This calls for more studies on climate change communication and audience perception. The current study will, therefore, examine Africa's contribution to climate change mitigation and adaptation, which is very imperative at a time when the world has agreed to take action to combat climate change and its effects, according to SDG, 13.

Theoretical framework

This study is anchored on the Selective Exposure Theory. The Selective Exposure Theory, propounded by Leon Festinger in the 1950s, posits that people are motivated to reduce cognitive dissonance and maintain psychological consistency by gravitating toward information that supports their beliefs and avoiding information that contradicts them (Hreha, 2023). Festinger theorized that the selection of like-minded information could help people to reduce cognitive dissonance, an undesirable feeling that can arise when one has contradictory cognitions (Stroud, 2018). Selective exposure is a concept in behavioural science, psychology, and communication theories that refers to the tendency of individuals to preferentially seek, attend to, and engage with information, stimuli,

or experiences that align with their pre-existing beliefs, values, and attitudes (Hreha, 2023).

Stroud (2018) provides five possibilities why selective exposure to media messages occurs as:

- a. Cognitive dissonance—which entails a situation where one's beliefs and attitudes conflict with each other
- b. People seeking supportive information when motivation is beyond cognition
- c. Processing like-minded information requires less cognitive effort than processing uncongenial information.
- d. Moods and emotions which can affect information search
- e. People may make information selections based on their judgments about information quality and beliefs.

In the field of communication, selective exposure became a common explanation for why scholars had not uncovered more evidence of powerful media effects. This buttressed the point that people can select what media messages to expose themselves to, and climate change is often seen as a technical subject filled

with scientific jargon. The media have published stories and reports about the effects of climate change and how to adapt to it. However, the question this study attempts to address is, does the issue of selective exposure to media content shape public perception on adaptation?

Methods

This study made use of the questionnaire survey method. The population for the study was all residents of Lagos and Accra. The projected population of Lagos is 17,156,400 (World Population Review, 2025), while that of Accra is 1,963,264 (Worldometer, 2025). Therefore, the total number of people that make up the population is 19,119,664. Comrey and Lee (1992) provided the following scale of sample size adequacy: 50 – very poor, 100 – poor, 200 – fair, 300 – good, 500 – very good, and 1,000 or more – excellent (as cited in Pearson & Mundform, 2010). Using Comrey and Lee's formula of 1992, a sample size of 500 was adjudged representative for this study. Lagos state has a total of 20 Local Government Areas (LGAs) while Accra has 16 districts. Using the simple random sampling technique, 5 LGAs were selected for Lagos state and 5 districts for Accra, making it a total of 10. Subsequently, the accidental sampling

method was used to administer the questionnaire in the various study areas.

Fifty (50) copies of the questionnaire were administered in each LGA/district. The questionnaire consisted of open and closed-ended questions, carefully designed to address the issue of public exposure to, and perception of, climate change as reported by the media. Also, Likert Scale questions were used to assess respondents' perception of climate change in the study area. The Student t-test was used to test for significant differences in people's exposure to climate change reportage in Lagos and Accra. Student t-test, according to Anyadike (2009), is used to test for significant differences in the mean measurements of two sets of data, which in this case are the datasets from Lagos and Accra. Finally, the Mann-Whitney U test was used to test for significant differences in the perception of people towards media reportage of climate change. The Mann-Whitney U test, which is a non-parametric test of differences between the medians of comparable groups, was used because, according to Page-Bucci (2003), it is best suited for analysis of multiple Likert question responses, as used to assess people's perception of media coverage of climate change in this study.

Results

(i) Demographic data of respondents

Table 1: Demographic Data of Respondents in the Study Area

Variable	Lagos	Accra	Total
Sex			
Male	97 (38.8%)	153 (61.2%)	250
Female	137 (54.8%)	113 (45.2%)	250
Age			
Less than 20 years	62 (24.8%)	40 (16%)	102 (20.4%)
20-29 years	103 (41.2%)	148 (59.2%)	251 (50.2%)
30 + years	85 (34%)	62 (24.8%)	147 (29.4%)
Marital Status			
Never Married	164 (65.6%)	192 (76.8%)	356 (71.2%)
Married	70 (28%)	52 (20.8%)	122 (24.4%)
Separated/divorced/Widowed	16 (6.4%)	6 (2.4%)	22 (4.4%)

The demographic data for both cities showed that for Lagos, the female respondents (54.8%) were more than the males (38.8%); while that for Accra, there were more male respondents (61.2%) than females (45.2%). Also, a good percentage of the respondents from both cities were aged 20-29 (50.2%), followed by those aged 30 and above (29.4%). Those who were never married had the highest percentage (71.2%), while those who were separated, divorced, or widowed (4.4%) had the least percentage.

(ii) Exposure to mass media reports on climate change

The t-test statistics were used to test the hypothesis, which states that there is no significant difference in people's exposure to media reportage of climate change in Lagos and Accra. Generally, the results disagree with the hypothesis as there exist significant differences in exposure to media messages on climate change in Lagos and Accra. For instance, Newspaper ($t=-2.842$, $p<0.005$), Radio ($t=5.626$; $p<0.000$), Television ($t=3.144$; $p<0.001$), Magazine ($t=3.088$; $p<0.001$), and Facebook ($t=3.511$; $p<0.001$) exhibit significant differences in the way they exposed people in Lagos and Accra to messages on climate change (see Table 2).

Table 2: T-test Results on the Exposure of Climate Change Information by the Media to people in Lagos and Accra

S/no	Variable	Lagos n(mean)	Accra n(mean)	t- value	p-value
1.	Respondents read or listen to weather forecast	250 (0.776)	247 (0.741)	- 0.913	0.362
2.	Respondents get climate change information from newspaper	250 (0.568)	247 (0.441)	- 2.842	0.005**
3.	Respondents' other media sources for climate change stories				
i.	Radio	250 (0.408)	250 (0.652)	5.626	0.000***
ii.	Television	250 (0.596)	250 (0.728)	3.144	0.002**
iii.	Magazine	250 (0.208)	250 (0.108)	- 3.088	0.002**
iv.	Facebook	250 (0.384)	250 (0.240)	- 3.511	0.005***
v.	Twitter	250 (0.068)	250 (0.084)	0.674	0.501
vi.	Others	250 (0.156)	250 (0.128)	- 0.896	0.371
4.	Responses to solution proffered by the media in adapting to the effects of climate change.				
i.	Measuring and reporting GHGs	250 (0.320)	250 (0.356)	0.850	0.396
ii.	Changes in what they eat	250 (0.268)	250 (0.108)	- 4.668	0.000***
iii.	Planting of drought tolerant crops	250 (0.156)	250 (0.300)	3.887	0.001***

iv.	Adopting technologies that emit less CO ₂	250 (0.484)	250 (0.520)	0.804	0.422
v.	Diversification of income	250 (0.060)	250 (0.064)	0.185	0.853
5.	Responses to solutions proffered by the media towards mitigating the effects of climate change				
i.	Avoid burning of bushes	250 (0.504)	250 (0.664)	3.671	0.003**
ii.	Planting more trees	250 (0.356)	250 (0.716)	8.637	0.000***
iii.	Clearing of drainage systems	250 (0.34)	250 (0.352)	0.282	0.778
iv.	Reduction in the emission of CO ₂ gas	250 (0.288)	250 (0.384)	2.280	0.023
v.	Use of environmental friendly cooking gas	250 (0.124)	250 (0.188)	1.976	0.049
6.	Responses to solutions proffered by the media towards reducing the impact of climate change				
i.	Careful use of electricity	250 (0.284)	249 (0.212)	- 1.842	0.066
ii.	Recycling of waste	250 (0.492)	249 (0.598)	2.395	0.017
iii.	Planting of trees/afforestation	250 (0.348)	249 (0.699)	8.361	0.000***
iv.	Walking more often	250 (0.112)	249 (0.048)	- 2.638	0.009**
v.	Installing solar heating system	250 (0.14)	249 (0.169)	0.886	0.376
vi.	Taking public transport more often	250 (0.092)	249 (0.048)	- 1.919	0.056

From Table 2 above, there exist no significant difference in the way respondents from Lagos and Accra read or listen to weather forecasts from the mass media ($t=0.913$). As shown in the results, the mean scores of exposure to weather forecasts for Lagos (0.776) and that of Accra (0.741) were almost the same. The results further show that more respondents from Accra were exposed to climate change messages from the television (mean=0.652) compared to Lagos (mean=0.408). On the other hand, more Lagosians were exposed to climate change messages from Facebook (mean=0.384) as against respondents from Accra (mean=0.240).

(iii) Respondents' perception of climate change

In order to test the significant differences in perception of media reportage of climate change in the two study areas,

the Mann Whitney U test was applied to the dataset. The results of the Mann Whitney U test reveal that, generally, there exist significant differences in the manner respondents from Lagos and Accra perceived climate change reportage by the media. It was only in three variables (*The media have been able to educate me on mitigation of climate change: Z = 1.689*), (*The media have been able to educate me on the effects of climate change: Z=0.801*) and (*Climate change is a science-inclined topic which the media cannot report well: Z= 1.611*) that there were no significant differences in the way the respondents perceived climate change reportage in Lagos and Accra. All the 10 other variables showed significant differences at 0.05 level of confidence on the way respondents perceived climate change reportage in Nigeria and Ghana (see Table 3 below).

Table 3: Mann Whitney U-test Results of the Perception of Newspaper Reports on Climate Change by People in Lagos and Accra

S/no	Variable	Rank Sum (Lagos)	Rank sum (Accra)	Adjusted variance (Combined)	Z value (Mann-Whitney U-Test)	p-value
1	The media have been able to educate me on the	67653.5	53624.4	2188628	-4.075	0.001***

	causes of climate change					
2	The media have been able to educate me on the effects of climate Change	62921	58850	2139057	-0.801	0.423
3	The media have been able to educate me on adaptation strategies of climate change	66305.5	55465.5	2170934	-3.092	0.002**
4	The media have been able to educate me on mitigation of climate change	64226.5	57544.5	2149270	-1.689	0.091
5	I get reliable information on climate change from the media	66480.5	55290.5	2213447	-3.180	0.001***
6	Climate change is a science-incline topic which the media cannot report well	64073.5	57204.5	2310360	-1.611	0.107
7	The media alter stories and do not properly cover the climate change debate	58062	63216	2305476	2.347	0.018*
8	I do not think the media possess the necessary skills to handle climate change reporting	65029	56249	2318615	-2.236	0.025*
9	Climate change is a punishment from God	69657	51621	2204963	-5.409	0.001***

10	The media usually report climate change when there is a major climatic disaster	56330	64948	2236552	3.541	0.001***
11	Climate change poses no challenge to humans	73935	47343	2294193	-8.127	0.001***
12	The media do not provide in-depth report on climate change	57791	63487	2256657	2.552	0.010*

Discussion

The issue of climate change is a serious one and urgent action is needed to combat and mitigate its effects. For this to be possible, the public needs to be educated on the mitigation and adaptation strategies available. The media can do this by reporting issues of climate change and also providing a platform where information can be disseminated from scientists to policymakers and the general public. The findings of this study showed that the residents of Lagos and Accra are exposed to climate change reports from newspapers, magazines, radio, television and Facebook. This is slightly different from Whitmarsh (2009), who identified television, newspapers and radio as the most common sources of information on climate change and global warming. This study also revealed that the media have

proffered solutions to climate change adaptation, as the respondents agreed that they now plant drought-tolerant crops and have also changed some of the things they eat. With regard to mitigation, they agreed that they now avoid burning of bushes and have also begun to plant more trees. Other activities they engage in to reduce the impact of climate change include the planting of more trees and walking more often. This is an improvement from Cordero, et. al. (2008), who found that respondents connect global warming only with visible pollution (exhaust from cars or factories), and discount more indirect emissions through electricity use and product or food consumption. Whilst respondents from the two study areas do not listen to or read weather forecasts, the media in both areas have exposed their audience to the issue of climate change via several media platforms.

As regards perception, respondents in Lagos and Accra agreed that the media have been able to educate them on the causes of climate change and its adaptation strategies. However, they feel that the media alter stories on climate change, do not possess the necessary skills to handle climate change reports, and thus, do not provide in-depth reports on climate change. This can be attributed to the fact that environmental journalism around the world is fraught with capacity challenges (in terms of time, personnel, and financial resources) to thoroughly cover complex and dynamic stories at the human-environment interface (Luedcke & Boykoff, 2017). Results of the current study also show that the media only report climate change stories when there is a major disaster, which can be attributed to a lot of issues. The following studies, Tagbo (2010) and Ajaero, et. al. (2018), for instance, report that journalists complained that climate change stories are a "hard sell" compared to politics and entertainment, and so they wait for disasters to occur before publishing on climate change to sell their papers. This has resulted in climate change reporting being event-driven with little or no attempt to link the local events to the larger climate change discourse (Kakonge, 2012). Boykoff, et. al. (2008) suggest that lack of specialist

journalists in the area of climate change affects coverage of the issue.

The questionnaire survey conducted in the current study contained both open-ended and closed-ended questions. One of the open-ended questions required respondents to define climate change. This was done to further assess their understanding of the issue. While a handful defined the term correctly, a good number could not; and others did not attempt the question as they cannot define the term. Some of them see climate change as a change in the weather, because they believed that they are feeling the effects of the change in climate. Furthermore, respondents who did not answer the question also agreed that they have been experiencing changes in the weather and were able to identify changes like extreme heat, excessive/heavy rainfalls which result in flooding, an increase in flooding, less rainfall, drought, desertification, and less crop yield. The reason for their inability to link these changes to climate change can be deduced from studies by BBC (2008) and Fahn (2009) which concluded that Africans are aware of climate changes, but there are no local terminologies for it due to widespread illiteracy.

Another open-ended question asked the respondents the reason for their answer

to the question of whether they read or listen to weather forecasts in the media. Respondents who do not listen to weather forecasts in the media gave reasons that weather reports are boring to watch, do not concern them, and are not necessary. A respondent captured his reason thus: "I do not find it interesting and the knowledge of whether it will rain or not is not necessary as I already know that it does not rain during the dry season and it rains during the rainy season" (Questionnaire 125, Nigeria). However, another respondent who reported listening to weather forecasts in the media expressed thus: "I listen to weather forecast for the day because it enlightens me on what to expect" (Questionnaire 89, Ghana). This is where the selective exposure theory comes in. The fact that people can decide on what issues to expose themselves to inadvertently influences their perception of that issue. This can lead to selective perception as people can cling to their preconceived perception instead of exposing themselves to reports that can change their views.

Nigeria and Ghana are developing West African countries with the majority of their citizens living below the estimated standard of living per day. Climate change is another burden that needs to be tackled if Africa must queue into the

Sustainable Development Goals of the United Nations. One aspect of this study that should stir the concern of African leaders is the fact that the respondents do not see climate change as posing a challenge to them. This can be attributed to the fact that the media in Africa mostly frame climate change as an environmental issue (Cramer, 2008; Ajaero et. al., 2018); hence, they discuss it with alarm (Shimhanda & Vivian, 2022) or via narratives driven by politics (Mwali et. al., 2021). Furthermore, this might be as a result of a generalized belief that the risks of climate change are greater to others than to oneself and that the consequences will happen in the future but not now (Chadwick, 2017; Leiserowitz et. al., 2014; Lorenzoni & Pidgeon, 2006).

Public understanding of and concern for climate change are particularly important to policymakers given the desire for public acceptance of policies and risk management procedures (Chadwick, 2017). The fact that the religious beliefs of people in the study areas affected their perception of climate change should be a source of concern for the government and policymakers. Some respondents both from Lagos and Ghana viewed climate change as a punishment from God. With such perception, taking action to combat the effects of climate change would be

taken as a matter of prayers by the people, as no practical solution will make sense. This problem also calls for a more concerted effort from the media and even religious leaders to change the perception of the people and educate them on the adaptation and mitigation strategies available to combat the effects of climate change.

Conclusion

This study sought to investigate how the African media have helped in shaping people's perception of climate change, using Lagos in Nigeria and Accra in Ghana as study areas. To a large extent, the media have helped in shaping the perception of their audience on climate change. The technicality of climate

change reportage was revealed as a problem in the study, because respondents believed that the media do not provide enough coverage on climate change as a scientific subject. The results of the variables about the media not being able to educate respondents well on the effects of climate change, and the mitigation strategies for climate change were not significant. This finding is important for climate change communication research as proper understanding of the effects of climate change and its mitigation strategies will help Nigerians and Ghanaians to adapt to the effects of climate change. This brings to the fore the serious need for proper education on climate change by the Nigerian and Ghanaian media.

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