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Awareness of Climate Change and Adaptation Strategies Among Secondary School Students in Ogbaru Local Government Area of Anambra State, Nigeria

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Abstract

This study investigated the awareness of climate change and adaptation strategies among secondary school students in Ogbaru Local Government Area of Anambra State, Nigeria. Two research questions guided, and two null hypotheses were tested at the 0.05 level of significance. The researchers employed a descriptive survey research design. The population consisted of 8,564 JSS and SS students from the 9 public secondary schools in the area. The sample size consisted of 170 students from the four schools sampled for the study using a simple random sampling technique (balloting). Data was collected using the 40-item climate change awareness and adaptation strategies questionnaire (CCASSQ) developed by the researchers and validated by experts. An estimate of the stability of the instrument yielded a

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reliability coefficient of 0.88 using Cronbach's Alpha statistic. Mean and standard deviation were used as descriptive statistics, while the independent samples t-test was adopted as an inferential statistic. The findings revealed a high level of awareness of climate change by the JSS and SS students. It also indicated a high level of awareness of climate change adaptation strategies by JSS and SS students in Ogbaru LGA of Anambra State. Based on the findings, it was recommended that the government should strengthen educational infrastructure, such as wind vanes and rain gauges, that could enable the teachers to meet the demands of this era of climate change.

Keywords: Adaptation, Awareness, Climate change, Junior Secondary, Senior secondary, Strategies

Introduction

One of the fundamental issues facing the world today is climate change. It is one of the most complex challenges of the 21st century. This is informed by the impact of the ever-growing complexities in the world's technological advancement, witnessed as centuries pass by. According to Onyali, Ezeugbor and Okoye (2015), climate change is caused by humans and nature. Amanchukwu, Amadi-Ali and Ololube (2015) stated that human activities such as the burning of fossil fuels, carbon emissions, and deforestation, among others, have negatively impacted the climate, resulting in changes in climate patterns. Climate change has been given several definitions. Moreno and Perdomo (2018), for instance, define climate change as a stable and durable change in the distribution of climate patterns over a period of time ranging from decades to millions of years. Mitchell, Williams, Hudson & Johnson (2017) define climate change as any change in climate, whether it is due to natural variability or as a result of human activity. Udegbunam and Onyegegbu (2021) refer to climate change as a fundamental element of the environment that causes alteration in an ecosystem if its variation becomes erratic. Eze, Sampson, Okoro and Okafor (2024) define climate change as a change of climate attributed directly or indirectly to human activities in the physical environment that alter the composition of the atmosphere, which is in addition to natural variability recorded for a long period of time. Even as the list of definitions of climate change may not be exhaustive, what is clear is the fact that the change in the climate might occur naturally or might be influenced by human activities.

Climate change is an issue that is generating widespread apprehension and is taking centre stage in virtually every human endeavour in the world today (Bristow & Ford, 2016). This phenomenon has been observed to have serious deleterious consequences for the Earth in the form of significant variations in regional climates, recurrent droughts, excessive heat waves,

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windstorms, killer floods, and so on. It is one of the greatest public policy issues of our time. In Nigeria, for instance, noticeable consequences of climate change could be seen in some areas, such as intense thunderstorms, widespread floods, and incessant droughts, among others. In Nigeria, the trends of climate hazards such as erosion, pollution, floods, changes in precipitation, gas emissions, and diseases have brought a lot of hardship to the country. Ogbaru Local Government Area of Anambra State is not exceptional in these effects of climate change. These changes in weather patterns have brought in their wake devastating impacts in this area. This is further elucidated by Pinga (2018) that global warming, influenced by changes in climate patterns, is evident in temperature variations, the drying up of soils and water bodies, increased pests and diseases, shifts in suitable areas for growing crops and livestock, increased desertification in the Sahara region, and change in rainfall patterns, which lead to erosion and flooding of farmlands, homes, and schools.

Consequently, Nigeria, in keeping with the dynamics of social change and the demands on education, revised its school curricula to include climate change awareness at all levels of secondary education. Awareness of climate change could help students and other individuals become scientifically and ecologically literate citizens who can describe, explain, and predict natural phenomena using sound ecological thinking and are capable of full participation in a democratic, sustainable society. The level of awareness of the impact of climate change could lead people to engage in activities that reduce the problems posed by the phenomenon. Chinedu (2018) viewed awareness as a state of consciousness and understanding of one's surroundings. Awareness is the state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns. It means having an idea of the existence of something. In relation to the above views, Turbuck and Lutgens (2018) equate awareness with knowledge of, understanding of, appreciation of, recognition of, attention to, perception of, consciousness of, acquaintance with, enlightenment with, mindfulness of, and cognizance of something. Climate change awareness also involves creating knowledge, understanding and values, attitudes, skills, and abilities among individuals and social groups towards the issues of climate change for attaining a better-quality environment.

The majority of Nigerians, including people of Ogbaru Local Government Area of Anambra State, seem to be unaware of climate change and the likely challenges despite the havoc caused in the area yearly. The Nigerian government, in creating awareness, put measures in place to mitigate the impacts of climate change. Ochieng (2014) argued that even as resources were put together to mitigate climate change, there was a need to educate people on what the phenomenon really is. Increasing people's awareness of

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climate change through education is an important measure to persuade people at all levels in the community to play an active role in mitigating and adapting to it. It is a known fact that awareness and enlightenment of people/communities on issues related to climate change and its effects on humans and their environment could definitely be the right instrument in combating its challenges in Nigeria in particular and the world in general.

Climate specialists have reportedly pointed out that a solution to climate change problems will require awareness and effective strategies to assist the vulnerable to cope with and reduce the effects of the negative impacts. In the context of this study, though in relation to the above views, awareness implies understanding and knowledge of the activities and events (like climate change) going on around one's environment. This knowledge and understanding, to a large extent, could perhaps determine the adaptation strategies taken by these individuals against the effects of climate change. Global warming is one of the greatest threats facing humankind today and needs urgent action to address the impacts. One such action is adaptation action, which could be used to reduce the adverse effects of climate change.

Adaptation means to become used to something. It is the ability to change something to make it more suitable. It is the process of adjusting to new conditions, stresses, and natural hazards that result from climate change (Schiper, 2012). Further, Schipper emphasized that adaptation to climate change takes place in response to experienced impacts as well as in anticipation of expected impacts. Adaptation in the context of climate change therefore, aims to reduce the vulnerability and improve the coping capacity or resilience of the people who rely on climate resources for their livelihood. In the same way, adaptation in the context of climate change includes policies and measures to reduce exposure to climate variability and extremes and the strengthening of adaptive capacity. Numerous studies conducted revealed that climate change responses cannot be effective unless the different needs of men and women are considered, particularly the boys and girls with limited or no access to community resources (Babugura, 2015; Bryan, Alvia, Huyer & Ringler, 2024). Adaptation is one of the responses to climate change in developing countries like Nigeria.

Adaptation seeks to lower the risk posed by the consequences of climate change. It is a practical step to protect countries and communities from likely disruption and damage that will result from the effects of climate change. Proper adaptation measures could help to minimize the adverse effects or to take advantage of any beneficial effects of climate change. Adapting to the changes has consequently emerged as a solution to address the impacts of climate change that are already evident in some regions (Ogali, 2012). This is because awareness and quality of knowledge on existence and issues relating to climate change adaptation could reduce the impact of the phenomenon. Eze

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et al. (2024) explained that climate change adaptation includes policies and measures to reduce exposure to climate variability and extremes and the strengthening of adaptive capacity. It involves managing new risks and strengthening resilience in the face of change.

Climate change adaptation is an area that is in dire need of publicity to help the public make informed decisions in its adaptation and mitigation. The level of awareness and attitude of learners about climate change, therefore, needs to reflect that complexity and be multidimensional and multifaceted, rather than focusing only on single variables such as carbon dioxide emissions. Above all, awareness and attitude towards climate change adaptation are the practical enlightenment that can help learners deal with uncertainty whenever the menaces of climate change occur. To ensure adequate adaptation and mitigation of the harmful impacts of climate change on our society, there is a need for adequate knowledge of the phenomenon.

Statement of the Problem

In Anambra State, it appears that many people, particularly in Ogbaru Local Government Area, are not aware of the causes and effects of climate change. The state is witnessing cases of flooding, late onset and early cessation of rains, increasing temperature, and incidence of malaria, among others, all of which affect lives and livelihoods. Flooding is devastating many communities, schools, and institutions in the state, especially in Ogbaru Local Government Area. In fact, some villages in the area have had substantial parts of their communities destroyed by the flood menace; thus, the people are forced to live as refugees in other parts of the state during the rainy season. Schools, churches, and other institutions are forced to close during this period every year.

The seeming ignorance of many people in Anambra State at large and Ogbaru Local Government Area in particular makes them sometimes engage in activities that contribute to the problems of climate change. This leaves one in doubt about the level of awareness of the causes and the effects of climate change and adaptation strategies put in the education system to facilitate control against the phenomenon. Considering this scenario, one wonders why emphasis on climate change awareness and adaptation strategies for its control have not been accorded much importance in secondary schools in Anambra State, Ogbaru Local Government Area, inclusive. Climate change as a topic features only in the secondary school geography syllabus. Considering the fact that only a few students offer this subject in secondary schools, it is possible that the majority of the students may not know what climate change is all about, its causes, and effects; hence the need for this study, which investigated the awareness of climate change and adaptation strategies among secondary school students in Ogbaru Local Government Area of Anambra State, Nigeria.

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Purpose of the Study

The general purpose of the study is to investigate the awareness of climate change and adaptation strategies among secondary school students in Ogbaru Local Government Area of Anambra State, Nigeria. Specifically, the study aimed to determine the:

1. students' level of awareness of climate change.
2. students' level of awareness of climate change adaptation strategies.

Research questions

The following research questions guided the study:

1. What are the mean responses of JS and SS students on their level of awareness of climate change?
2. What are the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies?

Hypotheses

- **HO_1:** There is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change.
- **HO_2:** There is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies.

Method

The study employed a descriptive survey research design. Two research questions and two null hypotheses guided the study, which was carried out in Ogbaru Local Government Area of Anambra State, Nigeria. The population of the study consisted of 8,564 junior secondary school (JSS) and senior secondary school (SS) students in 9 public secondary schools in the area (Post Primary Schools Service Commission [PPSSC], 2024). The junior secondary schools (JSS) have a population of 4,720 students, and the senior secondary schools (SS) have a population of 3,844 students. The sample consisted of 170 JSS and SS students in Ogbaru Local Government Area. The study adopted a multi-stage sampling procedure in the selection of the sample size and the schools used for the study. In the first stage, four (4) schools out of the nine (9) schools in the area were selected using a purposive sampling technique, considering urban and rural schools. In the second stage, sampling at the participants' level (students) was done, first by determining two percent of JS and SS students, which gave a total of 170 for both JS and SS students. Finally, to ensure greater representation of the sample relative to the population and guarantee that minority constituents of the population are represented in the sample, a proportionate stratified sampling technique was

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used to draw 94 JSS and 76 SS students, making a total of 170 students from 4 secondary schools in Ogbaru Local Government Area.

The instrument used for this study was the 40-item climate change awareness and adaptation strategies questionnaire (CCASSQ) developed by the researchers and validated by experts. The instrument had two clusters to elicit information based on the two research questions. Cluster A assessed the level of awareness of students on climate change. Cluster B elicited information on the adaptation strategies towards climate change effects. All clusters were structured under a four-point scale of Very High Level (4), High Level (3), Low Level (2), Very Low Level (1), from which students would tick (√) in the blank spaces that represent their stance towards each item in the scale. Cronbach's Alpha procedure was used to find the internal consistency of the items for scores derived from the trial testing. An overall internal consistency reliability estimate of 0.88 was obtained, which indicated that the instrument was reliable. The researcher, with the aid of research assistants, administered the instrument. The data generated was analyzed with descriptive statistical tools. Mean and standard deviation were used to answer the research questions. The real limit decision points of 0.00 – 1.49 (Very Low Level), 1.50 – 2.49 (Low Level), 2.50 – 3.49 (High Level), 3.50 – 4.00 (Very High Level) were used for taking decision while independent samples t-test statistics were used to test the null hypotheses at 0.05 level of significance.

Results

Research Question 1: What are the mean responses of JS and SS students on their level of awareness of climate change?

Table 1: Mean and Standard Deviation of the Respondents on Their Level of Awareness of Climate Change

S/N	Item Statement: I am aware that	Group	n	M	SD	Decision
1.	Climate change means an increase in temperature and changes in weather patterns created by carbon and other greenhouse gas emissions.	JS	94	2.88	.65	HL
		SS	76	3.21	.64	HL
2.	Climate change is caused by persistent afforestation.	JS	94	2.36	.55	LL
		SS	76	2.78	.42	HL
3.	Climate change is caused by persistent deforestation	JS	94	2.22	.51	LL
		SS	76	2.04	.58	LL
4.	Bush burning contributes to the warming of the atmosphere.	JS	94	2.68	.47	HL
		SS	76	3.50	.53	VHL
5.	Climate change is a result of climate forces and natural factors.	JS	94	2.53	.50	HL
		SS	76	3.50	.50	VHL
6.	Human activities are the main cause of climate change.	JS	94	2.55	.56	HL
		SS	76	2.47	.50	LL
7.	Carbon emission from the burning of fossil fuels is primarily responsible for climate change.	JS	94	3.20	.40	HL
		SS	76	3.24	.56	HL

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8.	Climate change is caused by carbon monoxide from industrial plants and vehicles.	JS	94	3.21	.53	HL
		SS	76	3.21	.60	HL
9.	Climate change is the divine punishment meted out on the world for numerous sins that the world has committed against the environment and God who created it.	JS	94	2.77	.97	HL
		SS	76	2.74	1.06	HL
10.	Vegetation and soils at the land surface control how energy received from the sun is returned to the atmosphere.	JS	94	2.84	1.01	HL
		SS	76	2.84	.92	HL
11.	Urbanization affects the global surface temperature.	JS	94	3.18	.77	HL
		SS	76	2.96	.90	HL
12.	The use of generators to provide electricity produces carbon that increases temperature.	JS	94	2.86	.82	HL
		SS	76	3.08	.73	HL
13.	Climate change will result in higher-intensity rainfall with changing precipitation patterns.	JS	94	3.01	.75	HL
		SS	76	2.83	.82	HL
14.	Climate change leads to overflooding of low-lying areas and destruction of lives and properties.	JS	94	3.07	.81	HL
		SS	76	3.03	.80	HL
15.	Climate change causes lung problems/diseases.	JS	94	2.47	.94	LL
		SS	76	2.50	.99	HL
16.	Gully erosion results from climate change.	JS	94	3.30	.70	HL
		SS	76	3.16	.85	HL
17.	Climate change leads to sea level rise.	JS	94	2.71	.95	HL
		SS	76	2.62	.97	HL
18.	Climate change leads to severe heat burns.	JS	94	2.12	.89	LL
		SS	76	2.03	.97	LL
19.	Climate change leads to excessive windstorms.	JS	94	2.39	.91	LL
		SS	76	2.30	.82	LL
20.	Climate change leads to poverty through its activities.	JS	94	2.89	.90	HL
		SS	76	2.83	.84	HL
	Cluster Mean	**JS**	**94**	**2.76**	**.24**	**HL**
		SS	**76**	**2.84**	**.27**	**HL**

Key: Real Limit Decision Points: VHL = Very High Level (3.50 – 4.00), HL = High Level (2.50 – 3.49), LL = Low Level (1.50 – 2.49), VLL = Very Low Level (0.50 – 1.49), n = Sample size, M = Mean, SD = Standard Deviation.

Table 1 shows the mean responses of JS and SS students on their level of awareness of climate change in Ogbaru LGA of Anambra State. It indicates that the mean responses of the JS and SS students to items 1, 7 – 14, 16, 17 and 20 are in the real limit decision point of 2.50 – 3.49. This implies that the JS and SS students in the secondary schools are aware of the statements in items on a high level. Also, the mean responses of JS and SS students to items 3, 18 and 19 are in the real limit decision point of 1.50 – 2.49. This implies

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that the JS and SS students are aware of the statements in the items on a low level. Further still, the table shows that the mean responses of JS students to items 2 and 15 are in the real limit decision point of 1.50 – 2.49, while those of their SS student counterparts are in the real limit decision point of 2.50 – 3.49. The implication of this is that the JS students are aware of the statements in the items on a low level, while their counterparts in the SS class are aware of the statements in the items on a high level. The table finally indicates that the mean responses of JS students to items 4 and 5 are in the real limit decision point of 2.50 – 3.49, while those of their SS student counterparts are in the real limit decision point of 3.50 – 4.00. It implies that the JS students are aware of the statements in the items on a high level, while their counterparts in SS class are aware of the statements in the items on a very high level. The cluster means (M = 2.76, SD = .24) and (M = 2.84, SD = .27) for the JS and SS students, respectively, imply that the JS and SS students indicated a high level of awareness of climate change in Ogbaru LGA of Anambra State, though the SS students obtained a higher mean score than the JS students.

Hypothesis 1: There is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change.

Table 2: t-test scores on JS and SS students' level of awareness of climate change in Ogbaru LGA

Group	n	X	SD	Df	t-cal	Sig. (2-tailed)	Decision
JS	94	2.76	.24				
				168	-2.01	.046	HO_1 Not Accepted
SS	76	2.84	.27				

Data in table 2 shows the t-test score on the level of awareness of climate change, t(168) = -2.01, $p = .046 < .05$. Since the p-value of .046 is less than the 0.05 probability level set for the study, the null hypothesis, which states that there is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change, is not accepted. This implies that there is a significant difference in the mean responses of JS and SS students on their level of awareness of climate change in Ogbaru LGA of Anambra State in favour of the SS students.

Research Question 2: What are the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies?

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Table 3: Mean and Standard Deviation of the Respondents on Their Level of Awareness of Climate Change Adaptation Strategies

S/N	Item Statement: I am aware of the following climate change adaptation strategies:	Group	n	M	SD	Decision
21.	Strengthening early warning signs.	JSS	94	3.07	.82	HL
		SS	76	2.63	.91	HL
22.	Switching to early-maturing varieties of crops.	JSS	94	2.47	.98	LL
		SS	76	2.67	.97	HL
23.	Tree planting and reforestation.	JSS	94	2.64	1.06	HL
		SS	76	2.67	1.02	HL
24.	Reduce raw material usage like wood.	JSS	94	3.20	.86	HL
		SS	76	3.18	.76	HL
25.	Encourage recycling of waste materials.	JSS	94	3.37	.84	HL
		SS	76	3.34	.83	HL
26.	Planting trees that thrive on erosion lands, such as bamboo tree.	JSS	94	2.01	.80	LL
		SS	76	2.03	.83	LL
27.	Decrease the use of old cars.	JSS	94	2.72	.99	HL
		SS	76	2.72	1.03	HL
28.	Proper disposal of waste in the environment.	JSS	94	1.99	1.06	LL
		SS	76	2.05	1.06	LL
29.	Increased use of solar energy.	JSS	94	2.72	.90	HL
		SS	76	2.84	.90	HL
30.	Mounting awareness campaigns through the radio and television.	JSS	94	2.01	.95	LL
		SS	76	2.04	.97	LL
31.	Listening to information about climate change.	JSS	94	2.82	.80	HL
		SS	76	2.83	.77	HL
32.	Resettlement of flood victims to avoid future occurrences.	JSS	94	2.65	.97	HL
		SS	76	2.86	1.00	HL
33.	Ensure that drains are cleared regularly.	JSS	94	2.88	.93	HL
		SS	76	2.88	.89	HL
34.	Construction of embankments to keep water back against pollution of the wetland.	JSS	94	2.39	.96	LL
		SS	76	2.55	.97	HL
35.	Construct fish ponds in the flooded area.	JSS	94	3.12	.83	HL
		SS	76	3.17	.81	HL
36.	Switch to other crops that can tolerate floods and heavy rainfall.	JSS	94	2.96	.80	HL
		SS	76	3.07	.75	HL
37.	Provision of relief materials from good-spirited individuals and the government.	JSS	94	2.97	1.04	HL
		SS	76	3.05	.95	HL
38.	Free medicine from the government to flood victims.	JSS	94	2.89	.91	HL
		SS	76	3.01	.90	HL
39.	Helping people in evacuation centers.	JSS	94	3.16	.83	HL
		SS	76	3.08	.89	HL
40.	Fumigation of all flooded areas.	JSS	94	2.94	.85	HL
		SS	76	3.07	.85	HL
	Cluster Mean	**JSS**	**94**	**2.75**	**.31**	**HL**
		SS	**76**	**2.79**	**.32**	**HL**

Key: Real Limit Decision Points: VHL = Very High Level (3.50 – 4.00), HL = High Level (2.50 – 3.49), LL = Low Level (1.50 – 2.49), VLL = Very Low Level (0.50 – 1.49), n = Sample size, M = Mean, SD = Standard Deviation.

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Table 3 shows the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies in Ogbaru LGA of Anambra State. It indicates that the mean responses of the JS and SS students to items 21, 23 – 25, 27, 29, 31 – 33, and 35 – 40 are in the real limit decision point of 2.50 – 3.49. This implies that the JS and SS students in the secondary schools are aware of the climate change adaptation strategies in those items on a high level. Also, the table shows that the mean responses of JS students to items 22 and 34 are in the real limit decision point of 1.50 – 2.49, while those of their SS students counterparts are in the real limit decision point of 2.50 – 3.49. The implication of this is that the JS students are aware of the climate change adaptation strategies in the items on a low level, while their counterparts in SS class are aware of the climate change adaptation strategies in those items on a high level. The table finally indicates that the mean responses of the JS and SS students to items 26, 28 and 30 are in the real limit decision point of 1.50 – 2.49. It implies that the JS and SS students are aware of the climate change adaptation strategies in the items on a low level. The cluster mean (M = 2.75, SD = .31) and (M = 2.79, SD = .32) for the JS and SS students, respectively, imply that the JS and SS students indicated a high level of awareness of climate change adaptation strategies in Ogbaru LGA of Anambra State, though the SS students obtained a higher mean score than the JS students.

Hypothesis 2: There is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies.

Table 4: t-test scores on JSS and SS students' level of awareness of climate change adaptation strategies in Ogbaru LGA

Group	n	X	SD	df	t-cal	Sig. (2-tailed)	Decision
JS	94	2.75	.31				
				168	-.74	.461	HO_1 Accepted
SS	76	2.79	.32				

Data in table 3 shows the t-test score on the level of awareness of climate change adaptation strategies, t(168) = -.74, p = .461 < .05. Since the p-value of .461 is greater than the 0.05 probability level set for the study, the null hypothesis, which states that there is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies, is accepted. This implies that there is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies in Ogbaru LGA of Anambra State.

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Discussion of Findings

The result of the research question 1 revealed that the JS and SS students indicated a high level of awareness of climate change in Ogbaru LGA of Anambra State. The result is against the assumption that those who have basic education (JSS) would be less aware of climate change as compared to other students in SS class, as they are likely to have less access to information and a greater capacity to understand the implications of such a phenomenon. Again, the result agrees with the finding of Eze et al. (2024), which reported that both JS and SS students were aware of the attributes of climate in Enugu State. Also, the corresponding hypothesis one showed that there is a significant difference in the mean responses of JS and SS students on their level of awareness of climate change in Ogbaru LGA of Anambra State in favour of the SS students. Therefore, it means that the level of awareness of climate change could be determined by the level of education.

The study also found that JS and SS students indicated a high level of awareness of climate change adaptation strategies in Ogbaru LGA of Anambra State. It further revealed that there is no significant difference in the mean responses of JS and SS students on their level of awareness of climate change adaptation strategies. This finding is in line with Eze et al. (2024), who posited that JSS and SS students were aware of climate change adaptation strategies. However, the result of hypothesis 2 is against that of Eze et al. (2024), who revealed that there was a statistically significant difference between the mean responses of JS and SS students to the identified climate change adaptation strategies in favour JSS students.

Conclusion

Based on the findings, the study concluded that senior secondary school students showed a more appreciable level of awareness of climate change when compared to their counterparts in junior secondary schools. The study also concluded that both JS and SS students in secondary schools showed an appreciable level of awareness of climate change adaptation strategies. The implication is that those who have a basic education are not less aware of climate change as compared to other students in SS class, as they both have equal access to information and equal capacity to understand the implications of climate change and climate change adaptation strategies.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. The government should, without delay, start organizing workshops and conferences for teachers at all levels on issues of climate change.

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2. The government should invest in school infrastructure, such as wind vanes and rain gauges, that could enable the teachers to meet the demands of this era of climate change.
3. The government should start carrying out radio and television campaigns on climate change adaptation strategies.
4. Both public and private schools should form climate change clubs to enlighten the students on the causes and effects of climate change and its adaptation strategies.

Conflict of Interest: The authors reported no conflict of interest.

Data Availability: All data are included in the content of the paper.

Funding Statement: The authors did not obtain any funding for this research.

Declaration for Human Participants: This study has been approved by the Nigerian Educational Research and Development Council (NERDC), and the principles of the Helsinki Declaration were followed.

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