Journal of Environmental and Tourism Education Vol. 8 No. 1 June 2025

Environmental Awareness and Undergraduates' Attitude Towards Environmental Behaviour in Calabar Education Zone, Cross River State, Nigeria

By
Imoke, Janet Devalsam
janetdevalsamimoke@gmail.com

Abstract
This study investigated the relationship between environmental awareness and undergraduates' attitude towards environmental behaviour in Calabar Education Zone of Cross River State, Nigeria. The investigated sub-independent variables were awareness of each of environmental concepts and environmental sustainability while undergraduates' attitude towards environmental behaviour was the dependent variable. Literature reviewed was based on the study's variables and a correlational survey research design was applied for the study. Stratified and proportionate random sampling techniques were used to select a sample of 702 respondents and data was collected using an instrument titled "Environmental Awareness and Attitude towards Environmental Behaviour Questionnaire" (EAAEBQ) was used to elicit data for the study. Cronbach Alpha was applied to estimate the instrument's reliability. Pearson Product Moment Correlation (PPMC) and tested at .05 level of significance. The findings revealed that awareness of environmental concepts and environmental sustainability were significantly correlated to undergraduates' attitude towards environmental behaviour. Recommendations included that undergraduates should be made to have more practical awareness of environmental concepts in the school by the positioning of numerous banners and billboards indicating the relationship between actual awareness of the concepts and display of environmental behaviour deemed appropriate and those that are inappropriate within the school.
Key words: Attitude, environmental behaviour, environmental awareness, environmental concepts, environmental sustainability

Introduction
In recent times, due to the ever-increasing number of problems related to the unsustainable exploitation of our natural environment, there have been drastic measures towards the need for adoption of attitudes and behaviours which show concern and care towards the environment. In line with the need, research into such attitudes and behaviours has come up with concepts such as environmental behaviour, pro-environmental behaviour, environmentally responsible behaviours, environmentally significant behaviours, and environmentally concerned behaviours (Nwankwo, 2021). Environmental behaviour (EB) as conceptualized by Hastuti, Arisanty, Muhaimin, Angriani, Alviawati, Aristin and Rahman (2024) refers to one's behaviour which has any profound pro- or anti-impact on the environment. Going further, they added that there are three (3)

dimensions of EB – (i) environmental knowledge which refers to one's knowledge and awareness of environmental issues and their solutions; (ii) environmental responsibility which is concerned with one's environmentally responsible behavior such as recycling, reducing littering, engaging in environmental sanitation and ensuring the maintenance of environmental aesthetics, and; (iii) value-belief-norm which refer to a combination of one's environmental value orientation, awareness of consequences of being unconcerned towards the environment, beliefs to be capable of acting, and personal norms towards the environment.

From the dimensions of environmental behaviour as stated by Hastuti *et al*., (2024), environmental behaviour expected of undergraduates in schools include non-littering in any of, and around classrooms, lecturers' offices, administrative blocks, drainages, roads within the school, hostels, etc; disposing of waste strictly where designated; non-disposal of solid/liquid metabolic waste in open and undesignated places; contributing towards obtaining simple waste-bins for classrooms where lessons are frequently held in the absence of such waste-bins; complementing the efforts of school cleaners by ensuring the cleanliness/sanitation of classrooms where lessons are held; showing concern for the general environmental aesthetics of the school, etc.

Inspite of this, observations reveal that undergraduates have been observed to engage in littering anywhere without care or concern. On the average, they drop all manner of litter in and around classrooms, lecturers' offices, administrative blocks, drainages, roads within the school and hostels. Learners have also been observed to prefer littering beside a waste bin instead of inside it. During the height of activities within a semester, it is common to see and perceive solid/liquid metabolic waste in open and undesignated places such as classroom blocks, around lecturers' offices, within drainages, etc. Also, it is commonplace for students to be comfortable having classes in very unkempt classes with all manner of stench-filled litter and cobwebs. Eneji, Onnoghen, Edung and Okon (2019) reported that undergraduates' waste management behaviour is negative as most of them engaged in dumping wastes in gutters/drainages or simply littering wherever they are. Also, Peters and Nzube (2022) observed that students' indiscriminate littering of refuse all over schools' environments, disposing of liquid/solid metabolic wastes with reckless abandon and general poor environmental sanitation habits was a very worrisome source of concern.

One of the most fundamental indicators which influences an individual's action in an event, a given situation or circumstance is the individual's attitude as it is a precursor to demonstrated behaviour (Bello, Hadiza & Bilkisu, 2023). Attitude refers to an individual's evaluation of developing a favourable (positive) or unfavourable (negative) disposition to perform a given

behaviour. Consequently, when an individual has a positive attitude towards an event, a given situation or circumstance which he or she faces, the person would be prone to acting positively. On the other hand, when an individual has developed a negative disposition, he or she would be more prone to acting negatively or destructively. The attitude towards display of EBs by the students based on observations and other studies appears to imply that the students have a negative disposition towards the display of EBs in a positive manner.

The responsibility to prevent and counter students' poor attitude towards the display of EBs expected of them is a prominent 21st Century issue which reiterates the necessity of all and sundry viewing themselves as part of the school environment, thus as part of the problem (Evert, Coetzee & Nell, 2022). In addition, the misconception that environmental issues should be left strictly for school managements to resolve should be challenged and replaced with the notion that everyone within the school community as a whole be held accountable for the students' display of expected EBs. Investigating students' attitude towards EB is a necessity as they are very susceptible to forming and internalizing new attitudes which they would take with them to their prospective individual communities and workplaces (Isa & Halim, 2023). Lastly, an investigation of the students' attitude towards EB could serve to enhance a generation of environmentally responsible citizenry which would ensure the sustainability of not only the school environment but also, the general society at large.

Many factors can possibly be connected with undergraduates' attitude towards environmental behaviour. Environmental awareness which refers to an individual's cognitive ability to be aware of his/her environment is one possible factor. It helps enrich an individual with the knowledge to recognize the threats and imbalances which the environment faces and enables the person for positive attitudes towards it with the aim of imbibing skills to resolve, prevent, protect and improve the environment both for the present and future generations (Stern, 2000). The indicators of environmental awareness include awareness of environmental concepts and awareness of environmental sustainability. Awareness of environmental concepts as a variable depicts students' cognitive awareness levels of environmental concepts related to waste generation, disposal and management. Studies have shown that students' awareness of environmental concepts can probably have a profound link with their attitude towards environmental behaviour in school (Malik, Yahaya & Ogunleye, 2020; Attah, Stanley & Immanuel, 2023).

Awareness of environmental sustainability as a variable refers to what students' extent of awareness of the fragility of the environment, its usage now and conservation for future generations, all from the standpoint of appropriate and inappropriate environmental behaviour. Some studies have revealed that this variable can have possible links with students' attitudes towards environmental behaviour in schools (Woko, 2019; Ogunyemi & Ifegbesan, 2022). It is

based on the issues of students' environmental behaviour in schools that the need arose for an investigation of the relationship between environmental awareness and undergraduates' attitude towards environmental behaviour in Calabar Education Zone, Cross River State.

Statement of the problem

Based on the purpose of learning in universities, students of such institutions are expected to display EBs depicting their learning level as undergraduates. Yet, it has been observed severally that they display behaviours such as littering everywhere and anywhere with little or no concern. Most often, they drop all manner of litter in and around classrooms, within lecturers' offices, around administrative blocks, inside drainages, on roads within the school and around hostels. Students have also been observed to prefer littering beside a waste bin instead of inside it. During the height of activities within a semester, it is common to see and perceive solid/liquid metabolic waste in open and undesignated places such as classroom blocks, around lecturers' offices, within drainages, etc.

Also, it is commonplace for students to be comfortable having classes in very unkempt classes with all manner of stench-filled litter and cobwebs. Aside above stated display of EBs, what is more worrisome is the attitude towards displaying the EBs. The non-chalant and reckless abandon attitudes with which the students display the EBs appears to depict absolute lack of care and concern towards expected EBs of undergraduates. Unfortunately, the trend seems to going on unabatedly without strategic measures to checkmate the production of a generation of environmentally "unconcerned" citizens which most likely would have no part to play in line with being environmentally responsible. It is based on the problem of students' non-chalant and reckless attitude towards EBs that this study seeks to answer the question – does environmental awareness have any correlation with undergraduates' attitude towards environmental behaviour in Calabar Education Zone, Cross River State, Nigeria?

Purpose of the study

The purpose of the study was to investigate the relationship between environmental awareness and undergraduates' attitude towards environmental behaviour in Calabar Education Zone of Cross River State, Nigeria.

Research questions

1. To what extent does awareness of environmental concepts relate with undergraduates' attitude toward environmental behaviour?

2. How does awareness of environmental sustainability relate with undergraduates' attitude toward environmental behaviour?

Statement of hypotheses

1. Awareness of environmental concepts has no significant relationship with undergraduates' attitude toward environmental behaviour
2. There is no significant relationship between awareness of environmental sustainability and undergraduates' attitude toward environmental behaviour

Literature Review

The concept of environmental sustainability was coined from the concepts of "environmental" and "sustainability". On its own, the term environmental implies qualifying how an event or a scenario relates to the environment. Sustainability on its own depicts the ability of something to be maintained at a certain rate or level. Thus, for Morelli (2011), environmental sustainability is seen as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity. Daly in Bolarinwa, Ishola, Oyesola and Festus (2020), viewed it as the rate of pollution creation, renewable resources saved and non-renewable resources depletion that can go on continuously indefinitely. From the two definitions, environmental sustainability appears to depict the relationship between man's need for development and the very essence of ensuring sustainability of not only natural resources but also the sustenance of ecosystem services for the earth's sustained functioning.

Ifegbesan, Ogunyemi and Rampedi (2017) assessed students' attitudes to solid waste management in Nigerian universities with implications for campus-based sustainability education. Students of state public universities in Ogun State served as the study's population. The study's objectives involved ascertaining the students' knowledge levels of waste disposal/management-related concepts, and also, their dispositions towards waste disposal practices in their school. The result showed that the students had very appreciable knowledge levels of waste disposal/management-related concepts but on the other hand, most of them displayed negative dispositions towards waste management practices in their school. Novel methods of plastic wastes management among students of secondary schools in Nigeria was researched by Ana, Oluseyi and Hammed (2019). The population comprised of students across schools in Oyo State. The study's objectives included examining their knowledge of plastic waste management concepts and their attitudes towards best plastic waste disposal methods. It was revealed that the students had above average knowledge of the plastic waste management concepts and favourable dispositions towards best plastic waste disposal methods.

Environmental Education and waste management behaviour among undergraduate students in Nigerian universities was investigated by Eneji, Onnoghen, Edung and Effiong (2019). The study's population was made up of students of public universities in Cross River State. The study's enquiries included verifying the students' attitude towards waste management and their knowledge of waste management-related concepts. The result revealed that the students not only revealed poor attitudes towards waste management methods but also demonstrated unappreciable knowledge levels of waste management-related concepts. Erhabor and Braimoh (2020) ascertained cognitive factors influencing the environmental practices of students with implication for environmental education among Nigerian undergraduates. Students of secondary schools in Edo State constituted the population. The study's objectives included examining the respondents' knowledge of selected environmental concepts and their attitudes towards the concepts. The result revealed that more than half (62.7%) of the students had low levels of knowledge concerning "waste disposal" and a similar number also revealed unfavourable dispositions towards the concept.

An assessment of waste management challenges and the mitigation strategies in Nigeria was conducted by Itiat (2020). The population was made up of students of tertiary institutions in Akwa Ibom State. The study' enquiries included examining attitudes towards prevalent waste management challenges and awareness of waste management mitigation concepts. Data analysis showed the respondents indicating unfavourable attitudes towards prevailing waste management challenges. On the other hand, they revealed very appreciable awareness levels towards environmental-related waste management mitigation concepts such as prevention, minimization, reuse and recycling. Malik, Yahaya and Ogunleye (2020) assessed the awareness level and practice of environmental management among students in Nigerian secondary schools. Students of schools in Kwara State constituted the population. The study's aims included ascertaining their knowledge levels of waste disposal/management-related concepts and their dispositions towards waste disposal. The result showed that the students had a very appreciable knowledge level of waste disposal/management-related concepts. It was also revealed that they had above average levels of disposition towards waste disposal practices.

Oluwatuyi, Alagbada, Agbele, Okunade, Babalola and Olusuyi (2020) examined waste management practice among students of secondary schools in south-western Nigeria. The study's population comprised of students from schools in Ekiti State. The study's aims involved evaluating the students' knowledge of environmental-based waste management concepts and their dispositions towards the waste management methods prevalent in their school. The results revealed the students showing appreciable knowledge of environmental-based waste management

concepts such as incineration, sanitary landfill, hog feeding and organic compost. On the other hand, the result showed that the students harboured negative dispositions towards the waste management methods with 89.72% rating the methods as being poor. Nwankwo (2021) investigated environmental literacy and waste disposal behaviour of university undergraduates in Nigeria. Students of schools in Enugu State composed the study's population. One of the study's null hypotheses was to ascertain the extent which the students' awareness of waste disposal-related concepts influenced their attitudes towards waste disposal. The result revealed that the students' awareness of waste disposal-related concepts had no significant influence on their attitude towards waste disposal.

Sustainable solutions to the effects of solid waste management in Federal Polytechnics in Nigeria were researched upon by Aliyu, Borori, Abdullahi, Jamiu and Haruna (2023). The population was made up of staff and students of school across Nasarawa State. The study's objectives involved examining their awareness of environmental-based solid waste management concepts and their perception (disposition) of waste management methods in their school. Data analysis revealed that the respondents demonstrated appreciable knowledge of environmental concepts related to waste generation and management. They also showed negative dispositions towards the waste management methods which were prevalent in their school. Attah, Stanley and Immanuel (2023) assessed sanitation practices among students in selected public secondary schools in Nigeria. Students of schools across Rivers State formed the study's population. The study's posers included verifying the students' awareness levels concerning solid waste management concepts, and their disposition towards ensuring appropriate solid waste disposal practices. Data analysis showed that the students had very appreciable awareness levels as it concerns solid waste management concepts, and also they portrayed very meaningful attitudes towards solid waste disposal practices.

Iyer (2018) investigated knowledge, attitude and behaviour (KAB) of Indian high school students towards electronic waste. The study's population comprised of students across schools in the country's South Bengaluru State. The study's objectives included assessing their knowledge level of the hazards which e-waste can impact on the environment in the event of their improper handling and their attitude towards e-waste disposal. The result revealed that the respondents not only had very appreciable knowledge levels of the hazards which improper handling of e-waste can impact on the environment but also they displayed favourable attitudes towards disposal of e-waste. Ekong and Nya (2019) assessed environmental knowledge, attitude and behaviour among undergraduates in a southern Nigerian University. Students of a university in Akwa Ibom State formed the study's population. The study's aims involved ascertaining knowledge of how inappropriate waste disposal methods serve to cause environmental pollution and their attitude towards the issue of waste disposal. It was revealed that the students did have very appreciable knowledge levels of the relationship between inappropriate waste disposal methods and

environmental pollution. The result also showed that the respondents did have very favourable dispositions towards the issue of waste disposal.

Waste disposal awareness, practice and the attitude of selected South African university of technology students with implications for Environmental Education was examined by Olufemi, Ogbonnaya, Mji and Mukhola (2019). Students of schools in the country's capital of Pretoria served as the population. The study's objectives included ascertaining the students' knowledge of how inappropriate waste disposal impacted on environmental sustainability and their attitudes towards waste disposal. It was revealed that the students did have very good knowledge of how inappropriate waste disposal caused harm to environmental sustainability. It was also revealed that the students had positive attitudes towards waste disposal. Woko (2019) examined the effect of poor management strategies of solid waste in Nigerian secondary schools. The study's population comprised of students from schools across Rivers State. The study's enquiries included verifying the respondents' awareness of the environment's situation (sustainability) and their behavioural intentions (attitude) towards waste disposal. The result showed that the respondents had a very high level of awareness of the environment's sustainability and also, portrayed an appreciable disposition towards waste disposal.

Joel, Manzuma, Abdulwasiu, Bahago and Muhammad (2020) assessed solid waste management in polytechnics across northern Nigeria. The population consisted of staff and students of a polytechnic in Kaduna State. An examination of their awareness of harmful effects of inappropriate waste disposal techniques on the environment and their disposition towards disposing waste appropriately was part of the study's posers. The result showed that the respondents did have an above average awareness of the harmful effects of inappropriate waste disposal techniques on the environment. As for their disposition towards disposing waste appropriately, only 21% of them indicated that they would dispose of their waste in dustbins while the rest were more disposed to either open dumping or littering. Knowledge, attitude and practices on e-waste management among Business Students in a public university in Malaysia were investigated by Azlan, Razak and Indiran (2021). The population was made up of students of a university in the country's capital city of Kuala Lumpur. The study's aims included ascertaining their knowledge of e-waste management as it concerns environmental sustainability and their disposition towards e-waste management. Data analysis revealed that the students had a very high level of knowledge of e-waste management as it concerns environmental sustainability and they also displayed very favourable attitudes towards e-waste disposal.

Nwosu, Orji, Nwachukwu, Oragba, Asoegwu and Awuchi (2021) evaluated waste management practices in Nigerian universities of technology. The study's population was made up of students from a university of technology in Imo State. The posers therein involved assessing the respondents' awareness levels of the effects of open dumping and burying waste disposal techniques to environmental sustainability, and also their disposition towards disposing waste using available waste bins. The result revealed that most of them were aware of the harmful effects of each of open dumping and burying waste disposal techniques to the environment's sustainability. The result also showed that despite their awareness of the effects of the waste disposal techniques, most of them preferred to open dump or litter their waste around the school's environment. Undergraduates' disposition and attitude to environmental literacy in sanitation and waste management in a Nigerian university was researched upon by Ogunyemi and Ifegbesan (2022). The study's population consisted of students from a public university in Ogun State. Two of the study's research questions ascertained their knowledge levels of environmental sanitation and waste management in connection with environmental sustainability, and their attitudes towards waste disposal. The result showed that the respondents not only had very high knowledge levels of environmental sanitation/waste management in connection with environmental sustainability but also expressed very favourable attitudes towards waste disposal.

An evaluation of the level of knowledge and awareness regarding e-waste among undergraduates in Bangladesh was researched by Jahan and Mim (2023). The population was made up of students across universities in the country. The study's posers included verifying the students' knowledge of how e-waste can damage the environment and also their attitude towards e-waste generation and recycling. The result showed that 76% of them were very knowledgeable concerning how e-waste can damage the environment while only 15% of them displayed favourable attitudes towards e-waste disposal. Mongar (2023) examined the impacts of environmental science on Bhutanese high school students' and their teachers' environmental sustainability competences. The population was made up of students and teachers from the country's Samtse area. The study's objectives involved ascertaining students' knowledge levels of the interaction between waste disposal and environmental sustainability, and their attitudes towards waste disposal. The result revealed that the students not only had very appreciable knowledge levels of the interaction between waste disposal and environmental sustainability but also, very positive attitudes towards waste disposal.

Methodology

The study adopted a correlational survey research design. The target population for the study were the 2019/2020 and 2020/2021 academic session students in selected Departments across Faculties of Arts & Social Science Education, Educational Foundation Studies and Vocational & Science Education in the University of Calabar, the Faculty of Education in the University of Cross River

State (UNICROSS), and the Schools of Vocational Education and Science Education in COE. From records obtained from the two schools, the target population is 4,046 students. The reason for students of Faculties of Education only was that the researcher was focused on investigating "would be" teachers only (details shown in Table 1). From the population, a sample of 702 respondents was drawn using stratified and proportionate random sampling techniques. The data collection instrument was tagged the "Environmental Awareness and Attitude towards Environmental Behaviour Questionnaire" (EAAEBQ). It has sections A and B. Section A is concerned with respondents' demographics. Section B elicited responses concerning environmental awareness (environmental concepts and environmental sustainability) {6 items per sub-section totalling 12 items} on a response rubric of very well (VW), not too well (NTW), somehow (SH) and not at all (NAA) and attitude towards environmental behaviour {8 items} on a response rubric of always (A), often (O), sometimes (S) and rarely (R), thus the instrument has a total of 20 items.

The instrument was validated by two experts in Measurement and Evaluation in the Department of Educational Foundations and two experts in the Department of Environmental Education who ascertained the degree to which the items on the instrument measured what it is expected to measure. The reliability of the instrument was ascertained by conducting a trial test with 40 respondents not part of the sample and the obtained data was analysed using the Cronbach Alpha reliability method. The reliability coefficients for each of awareness of environmental concepts and environmental sustainability were .81 and .79, respectively while that for attitude toward environmental behaviour was .83. The data collection for the study was done by the researchers in conjunction with 4 research assistants lasted about 8 weeks. The data collected (99.15% return rate – 696 questionnaire copies) were analysed using Pearson Product Moment Correlation (PPMC) technique and tested at .05 level of significance.

Table 1: Breakdown of target student population for the study

Department/Unit	COE (2019/2020 & 2020/2021)	UniCal (2019/2020 & 2020/2021)	UniCross (2019/2020 & 2020/2021)	Total
Agric/Business Education	101	181	379	661
Arts Education	-	289	-	289
Biology Education	-	35	22	57
Curriculum & Instruction	-	203	147	350

Educational Admin. & Planning	-	462	443	905
Environmental Education	-	187	-	187
Guidance & Counselling	-	232	446	678
Human Kinetics & Health Education	63	167	-	230
Mathematics Education	13	42	-	55
Social Science Education	102	532	-	634
TOTAL	279	2,127	1,290	4,046

Source: Admission Records Unit of the COE, the University of Calabar and the University of Cross River State (2023)

Presentation of results

Ho_1

Awareness of environmental concepts has no significant relationship with undergraduates' attitude toward environmental behaviour. To test this hypothesis, awareness of environmental concepts and undergraduates' attitude toward environmental behaviour were compared using PPMC. The result of the analysis is presented in Table 2.

Table 2: PPMC analysis of awareness of environmental concepts and attitude toward environmental behaviour (N=696)

Variables	$\bar{x}$	SD	R	p-level
Awareness of environmental concepts (X)	17.39	1.90	.317*	.000
Attitude toward environmental behaviour (Y)	22.71	2.32		

*Significant at .05. p<.05; critical r-value=.088.

The result of the analysis in Table 2 revealed that awareness of environmental concepts produced a mean score of 17.39 with a standard deviation of 1.90 while attitude toward environmental behaviour produced a mean score of 22.71 with SD of 2.32. The result further revealed that the calculated r-ratio of .317 obtained with a p-value of .000 is greater than the critical value of .088 and this met the condition required for significance at the .05 level. Hence, the null hypothesis that awareness of environmental concepts has no significant relationship with undergraduates' attitude toward environmental behaviour was rejected. With the obtained value of .317, it indicated that the alternate hypothesis was accepted.

H_{O2}

The second hypothesis stated that there is no significant relationship between awareness of environmental sustainability and undergraduates' attitude toward environmental behaviour. To test this hypothesis, awareness of environmental sustainability and attitude toward environmental behaviour were compared using PPMC. The result of the analysis is presented in Table 3.

Table 3: PPMC analysis of awareness of environmental sustainability and attitude toward environmental behaviour (N=696)

Variables	$\bar{x}$	SD	R	p-level
Awareness of environmental sustainability (X)	15.64	2.38	.149*	.000
Attitude toward environmental behaviour (Y)	22.71	2.32		

*Significant at .05. p<.05; critical r-value=.088.

The result of the analysis in Table 3 revealed that awareness of environmental sustainability produced a mean score of 15.64 with a standard deviation of 2.38 while waste disposal attitude among undergraduates produced a mean score of 22.71 with a standard deviation of 2.32. The result further revealed that the calculated r-ratio of .149 obtained with a p-value of .000 is greater than the critical value of .088 and this met the condition required for significance at the .05 level. Hence, the null hypothesis that there is no significant relationship between awareness of environmental sustainability and undergraduates' attitude toward environmental behaviour was rejected. With the obtained value of .328, it indicated that the alternate hypothesis is accepted.

Discussion of findings

The result of the first hypothesis showed that awareness of environmental concepts has a significant relationship with undergraduates' attitude toward environmental behaviour. This meant that the students' cognitive awareness levels of environmental concepts related to waste generation, disposal and management did have a significant link with their attitude towards environmental behaviour in school. The finding of this study is in agreement with those of Ifegbesan *et al*., (2017), Ana *et al*., (2019), Eneji *et al*., (2019), Erhabor and Braimoh (2020), Itiat (2020), Malik *et al*., (2020), Oluwatuyi *et al*., (2020) and Aliyu *et al*., (2023) who all revealed that students' awareness of environmental concepts was linked to their attitude toward environmental behaviour.

For the study's second hypothesis, the alternate hypothesis was accepted that there is no significant relationship between awareness of environmental sustainability and undergraduates' attitude

toward environmental behaviour. This meant that students' awareness about the fragility of the environment, its usage now and conservation for future generations, all from the standpoint of appropriate and inappropriate waste disposal practices has a connection with their attitude toward environmental behaviour in school. The finding is supported by those of Iyer (2018), Ekong and Nya (2019), Olufemi *et al*., (2019), Joel *et al*., (2020), Azlan *et al*., (2021), Nwosu *et al*., (2021), Ogunyemi and Ifegbesan (2022) and Mongar (2023) who all revealed that students' awareness of environmental sustainability was connected with their environmental behaviour in school.

Conclusion and Recommendation

Students' display of environmental behaviour in schools is of concern in recent times due to the importance of higher education and the ever-increasing number of students who enrol for higher education. Demonstration of inappropriate environmental behaviour has numerous consequences for within a given environment. Issues of flooding due to indiscriminate disposal in unauthorized spots, pollution of the natural environments (land, air and water-bodies), dirty environments serving as breeding grounds for disease causing agents, and health problems to human beings and even some animals as a result of the flooding and pollution are some consequences which have been proven to occur in the event of indiscriminate disposal of wastes. Investigating students' attitudes toward display of appropriate environmental behaviour could serve to bring about an understanding of how to enhance them adopt not only appropriate but best pro-environmental behaviour practices. This is because an individual's attitude has a very significant influence on the person's behavioural intentions. In the event of impacting on an individual's attitude towards a specified action, the likelihood is that the person would practically act in line with the expected outcome. In other words, in the event of engaging students in activities that should make their attitude towards appropriate environmental behaviour more favourable, the more the likelihood that they would practically engage in best environmental behaviour practices. On the other hand, in the event of no activities being created for them to engage in towards appropriate environmental behaviour, they most likely would not develop favourable tendencies towards environmental behaviour, thus ensuring the prevalence of the consequences of non-chalant environmental behaviour within the school's environs.

Based on the finding, it is recommended that students should be made to have more practical awareness of environmental concepts in the school by the positioning of numerous banners and billboards indicating the relationship between actual awareness of the concepts and display of environmental behaviour deemed appropriate and those that are inappropriate within the school. Secondly, they should also be exposed to rigorous practical learning experiences concerning the fragility of the environment, its usage now and conservation for future generations, all from the standpoint of appropriate and inappropriate environmental behaviour.

References

Aliyu, M. S., Borori, S. U., Abdullahi, S. M., Jamiu, Y. M., & Haruna, A. (2023). Sustainable solutions to the effects of solid waste management in Federal Polytechnic Nasarawa, Nigeria. *Iconic Research and Engineering Journals, 6*(7), 71-77

Ana, G. R. E. E., Oluseyi, O. A., & Hammed, T. B. (2019). Novel methods of plastic wastes management among students of secondary schools in Ibadan, Nigeria. *Journal of Environment and Waste Management, 6*(1), 283-289

Attah, J. S., Stanley, H. O., & Immanuel, O. M. (2023). Assessment of sanitation practices among the students in selected public secondary schools in Port Harcourt, Nigeria. *International Journal of Pathogen Research, 12*(5), 1-9

Azlan, R. M. D., Razak, S. S. A., & Indiran, L. A. (2021). Knowledge, attitude and practices on e-waste management among Business Students in a public university. *International Journal of Academic Research in Business and Social Sciences, 11*(8), 1472–1478

Bello, S., Hadiza. A. G., & Bilkisu, U. M. (2023). Comparison of environmental attitudes of science and non-science undergraduate students of Sokoto State University, Nigeria. *Journal of Educational Research in Developing Areas (JEREDA), 4*(2), 139-147

Bolarinwa, O. O., Ishola, A. R., Oyesola, S. R., & Festus, A. F. (2020). Environmental sustainability and stakeholder's value of listed manufacturing companies in Nigeria. *African Journal of Accounting and Financial Research, 3*(1), 25-43

Ekong, I., & Nya, C. (2019). Assessment of environmental knowledge, attitude and behavior among undergraduates in a southern Nigerian University. *American Journal of Environment and Sustainable Development, 4*(2), 68-76

Eneji, C. V. O., Onnoghen, U. N., Edung, A. E., & Effiong, G. O. (2019). Environmental Education and waste management behaviour among undergraduate students of the University of Calabar, Nigeria. *Journal of Education and Practice, 10*(24), 76-85

Erhabor, N. I., & Braimoh, V. (2020). Cognitive factors influencing the environmental practices of students: Implication for environmental education. *Aquademia, 4*(1), ep20013, (e-journal). Retrieved on 26/01/2024 from https://doi.org/10.29333/aquademia/8224

Evert, M., Coetzee, H., & Nell, W. (2022). Environmental attitudes among undergraduate students at a South African university. *Interdisciplinary Journal of Environmental and Science Education, 18*(1), e2260 (e-journal). Retrieved on 02/10/2024 from https://doi.org/10.21601/ijese/11330

Hastuti, K. P., Arisanty, D., Muhaimin, M., Angriani, P., Alviawati, E., Aristin, N. F., & Rahman, A. M. (2024). Factors affecting pro-environmental behaviour of Indonesian university students. *Journal of Turkish Science Education, 21*(1), 102-117

Ifegbesan, A. P., Ogunyemi, B., & Rampedi, I. T. (2017). Students' attitudes to solid waste management in a Nigerian university: Implications for campus-based sustainability education. *International Journal of Sustainability in Higher Education, 18*(7), 1244-1262

Isa, N. S., & Halim, L. (2023). Challenges and strategies to develop pro environment behaviours among middle school students: A systematic literature review. *International Journal of Academic Research in Business and Social Sciences, 13*(11), 1504-1525

Itiat, C. I. (2020). Assessment of waste management challenges and the mitigation strategies in Nigeria. *International Journal of Educational and Scientific Research Findings, 4*(2), 47-55

Iyer, L. S. (2018). Knowledge, Attitude and Behaviour (KAB) of student community towards electronic waste – A case study. *Indian Journal of Science and Technology, 11*(10), 1-10

Jahan, D., & Mim, A. (2023). Evaluating the level of knowledge and awareness regarding e-waste among university students in Bangladesh. *International Journal of Economics, Commerce and Management, 11*(3), 72-96

Joel, J. U., Manzuma, B., Abdulwasiu, A., Bahago, Y., & Muhammad, Y. S. (2020). Assessment of solid waste management at Nuhu Bamalli Polytechnic (Upe Main Campus) Zaria. *African Scholar Journal of Environmental Design & Construction Management (JECM-4), 19*(4), 275-290

Malik, N. A., Yahaya, O. Y., & Ogunleye, E. F. (2020). Assessment of awareness level and practice of environmental management among students in Ilorin, Kwara State, Nigeria. *FUDMA International Journal of Social Sciences (FUDIJOSS), 2*(2), 108-117

Mongar, K. (2023). The impacts of environmental science on Bhutanese students' environmental sustainability competences. *Australian Journal of Environmental Education*, 2, 1–15

Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability, 1*(1), 1-10

Nwankwo, C. (2021). *Environmental literacy and waste disposal behaviour of university undergraduates in Enugu State, Nigeria*. Ph.D Dissertation submitted to the Department of Marketing, Faculty of Management Sciences, Nnamdi Azikiwe University, Awka, Anambra State

Nwosu, O. U., Orji, C. G., Nwachukwu, C. S., Oragba, C. H., Asoegwu, C. R., & Awuchi, C. G. (2021). Evaluation of waste management practices at the Federal University of Technology, Owerri (FUTO), Imo State of Nigeria. *International Journal of Advanced Academic Research, 7*(3), 32-48

Ogunyemi, B., & Ifegbesan, A. P. (2022). Pre-service teachers' disposition and attitude to environmental literacy in sanitation and waste management in a Nigerian university. *Journal of Education in Black Sea Region, 8*(1), 56-65

Olufemi, A. C., Ogbonnaya, U. I., Mji, A., & Mukhola, M. S. (2019). Waste disposal awareness, practice and the attitude of selected South African university students: Implications for Environmental Education. *Journal of Human Ecology, 65*(1-3), 12-25

Oluwatuyi, V. S., Alagbada, B., Agbele, A. T., Okunade, R. A., Babalola, T., & Olusuyi, A. M. (2020). Waste management practice among students of Doherty Memorial Grammar School, Ijero Ekiti, Ekiti State, Nigeria. *International Journal of Research and Scientific Innovation (IJRSI), VII*(VI), 208-211

Peters, R. N., & Nzube, A. C. (2022). Examining the level of participation and attitude of university students towards environmental sanitation in Nnamdi Azikiwe University Main Campus Awka (Unizik), Anambra State, Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS), VI*(X), 66-73

Stern, P. C. (2000). Towards a coherent theory of environmentally significant behaviour. *Journal of Social Issues, 56*(3), 407-424

Woko, F. C. (2019). Effect of poor management strategies of solid waste in secondary schools in Onelga, Rivers State. *International Journal of Educational Research and Management Technology, 4*(4), 103-116