



## Determinants of Environmental Responsible Behaviour among Undergraduate Students of College of Humanities and Culture, Osun State University, Nigeria

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### KEY WORDS

Environmental awareness,  
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### ABSTRACT

The environment plays a vital and important role in the life of human and their endeavors. There is scarcity of information factors that determine the behaviour of students. The research assessed the determinants of environmental responsible behavior among undergraduate students of College of Humanities and Culture, Osun State University, Osogbo, Nigeria. This research study adopted a descriptive research design, using a case study approach. Multi-stage random sampling technique was used. The sample size of 121 was obtained out of 1262 of the total numbers of students in the four randomly selected Departments. Chi-square was employed to test the significant relationship between student socio-economic characteristics and their environmental awareness and attitudes. Spearman rank correlation was also employed to test the significant correlation between environmental awareness and attitude of students. The result of the research showed that there was no significant relationship between students' socio-economic characteristics and their environmental awareness and attitudes at  $p > 0.05$ . However, the study showed that there is significant correlation between environmental awareness and attitudes of students at  $p < 0.05$ . The study concluded that environmental awareness has a powerful impact on environmental attitude and behaviour of the students, hence, recommends that environmental studies, degradation and conservation should be incorporated into student's curriculum to improve their positive attitudes towards the environment.

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### INTRODUCTION

Humans cannot perform any activity without the environment. The environment plays a vital and important role in the life of human and their endeavors whereby the environment benefit human if largely conserved and maintained. Human beings are responsible for the environmental pollution caused as a result of violating the laws of nature. Increased knowledge about the environment is assumed to a precondition for the attitude towards environment which can influence environmental policy (Oguz *et al.*, 2010). The importance of environmental education must be encouraged in higher education curricula (Arcury, 1990). Although people seem to be aware of the consequences that are existent in nature at a given time, yet people are hesitant to change their lifestyle even when the consequences are right around the corner.

The role of humans on the environment is prominent, they tend to be the major actor on the environment that use and control it. It is of a very crucial importance that humans have positive attitude, perception and behavior towards their environment because the environment is what constitutes their living. For years now, humans have mistreated and contaminated the very environment that sustains them. Thus, the broad concern for the environment can be so overwhelming that people do not know what to do or where to start making a difference. The list of issues surrounding our environment goes on, but there are some major ones that affect the majority of them overall: global warming and climate change; water pollution and ocean acidification; and loss of biodiversity (Hayta,

2006; Yardımcı and Kılıç, 2010). These major issues need immediate attention and proactive actions on human part to ensure conservation of the only habitable planet which we call our home.

Unawareness of people about the impact of environmental use on nature and environment itself also brings about these issues and even increasing. If the environmental problems that arise in this way are not prevented, it will be the end of life on earth (Yılmaz *et al.*, 2002). Individuals' life and agricultural produce have suffered from these dangerous environmental problems which affect the texture and fertility of soil due to change in climate, causing excessive rain or unpredictable long dry season over a period of time, deforestation which leads to opening up the environment for easy washing of soil nutrients which leads to low agricultural produce. This effect may lead to poverty and poor malnutrition.

Environmental issues themselves cannot be ignored, but they have to be solved. Hence, the question here is "how can it be solved and from where do we start to solve the problem?" Understanding the root cause of the problem is necessary for an accurate solution to be applied. The increasing environmental activities toward the end of the 1960s reached the peak with "Earth Day" in 1970 (Thapa, 1999). Since then, there have been changes in the behaviour and attitudes of people toward environmental issues. However, while a majority of people have adopted environmental attitudes, environmentally responsible behaviors have not been reflected in life in the same level (Nouri *et al.*, 2008; Chen *et al.*, 2010).

The aim of this study was to instill environment awareness and concern into people especially students, and also educate them on how to conserve and preserve the environment. Students have always played an active role in the activities leading to the development of environmental awareness. Therefore, several studies have been carried out to understand the determinants of environmental attitudes and behaviors of the students, in addition, the fact that those students will be the ones who will manage and consume the future resources, hence, necessitated this study related to students.

## **METHODOLOGY**

### **Study area**

The study was conducted at the Ikire campus of the Osun State University, Osogbo, Osun State, Nigeria. The campus planning area lies within the tropical rain forest climate region with clear-cut hot and humid conditions during the rainy seasons. The onset of the rainy season in the area is characterized by strong winds. Rains are experienced over almost seven months of the year (April - October), while two months (November and December) are dry and dusty (Harmattan) and the three remaining months (January - March) fall within the hot and dry season. Temperatures in Ikire are as high as between 27-34°C. The mean annual temperature is about 27°C with a range of 4°C to 5°C. The coolest periods occur from April through December, coinciding with middle of the rainy and the harmattan seasons respectively. The highest temperatures are usually experienced between January and March, creating warm conditions. The planning Area lies from latitude 7°18' N - 7°30'N of the equator and 4°10'E - 4°20' E of the Greenwich Meridian. It covers 641,526,879.20 square meters land area and is bounded by major settlements and land mass such as Gbongan in the North-East; Shasa River and Ife North Local Government in the East; and, Osun River and Asejire in the West (UN-HABITAT, 2014).

### **Sampling Procedure and Data Collection**

Multi-stage random sampling technique was used. At the first stage of the sampling, 50% sampling intensity was used to randomly select four Departments out of the eight Departments in the College. The selected Departments were English and International Studies, Linguistics and Communication Studies, Tourism Studies and Philosophy. At the second stage of the sampling technique, out of the four departments randomly selected, 10% sampling intensity was used to sample the respondents in each Department according to their level. The sample size of 121 was obtained out of 1262 of the total numbers of students in the selected Departments as described by Diaw *et al.* (2002). In this light, 121 questionnaires were administered to the Departments randomly selected where 41 structured questionnaires were administered to English and International Studies, 46 to Linguistics and Communication, 15 to Tourism Studies, and 19 to Philosophy Department.

### **Data analysis**

Data of the study were analyzed using descriptive statistics (i.e., frequency, percentages, means and standard deviations) and inferential statistics by using a statistical analysis package SPSS 21. Chi square analysis was employed to test the relationship between socio-economic characteristics and perception of students about environmental issues. Statistical significance level was set at  $\alpha=0.05$ . Chi-square was also employed to test the significant relationship between student socio-economic characteristics and environmental awareness and attitude. Spearman rank correlation was used to test the correlation between environmental awareness and attitude of students.

## RESULTS AND DISCUSSION

### Perception of the Respondent on environmental issues

The categorization of the overall perception of the respondents with the environment was that 60.83% of respondent have positive perception about the environment while 39.17% of respondents have negative perception.

The result for categorization of undergraduate student in Ikire campus is positive. This is in line with Balakrishnan *et al.* (2020) who stated that Malaysian undergraduates have positive perception towards sustainable development of the environment. This is also in line with Direct Perception Theory (Hacker, 1991) and Theory of Instruction (Gagne and Dick, 1983) which claim that perception and attitude of an individual can be developed with the process of acquiring knowledge.

### Undergraduate students' awareness of environmental issues

Based on their awareness as presented in Table 1, 49.2% of the respondent agreed that it is possible to modify the natural environment to suit their comfort, 34.2% strongly agreed and only 4.2 % disagreed. 37.5% of the respondents agreed that the ecological crisis facing human has been greatly exaggerated, 25% strongly agreed, while 13.3% disagreed with this. The categorization of the overall attitude of the respondents with the environment was that 55.0% of respondents have positive environmental attitude while 45.0% have negative environmental attitude. The result revealed that the students possess slightly higher positive environmental attitude which is 55.0%. This is in line with Gigliotti (1992) that students highly supported Environmental Attitude. This is also in line with the report of Praneetham *et al.* (2012) that the expressed environmental attitudes of students positively affected environmental behaviour.

**Table 1:** Environmental awareness of undergraduate student on environmental issues

Statement	SA	A	U	D	SD
It is possible for humans to modify the natural environment to suit their comfort	34.2	49.2	10.8	4.2	1.7
Mankind was created to rule over the rest of nature such as animals and the elements of environment	43.3	35.0	10.8	7.5	3.3
An imbalance in the elements of nature can be dangerous for living	29.2	43.3	8.3	18.3	0.8
The natural environment has the capacity to adjust itself to cope with the effects of our world of industrialization	25.0	32.5	13.3	22.5	6.7
The so-called "ecological crisis" facing humankind has been greatly exaggerated	25.0	37.5	17.5	13.3	6.6

Where; SA= strongly agreed, A= agreed, U= undecided, D= disagreed and SD= strongly disagreed

### Relationship between students' socio-economic characteristics and their perception and awareness about environmental issues

Table 2 indicated that there was no significant relationship between students' socio-economic characteristics and their perception about environmental issues at  $p > 0.05$ . This showed that socio-economic characteristics such as gender, religion, marital status, ethnicity, nationality, level and age have no significant influence on student's perception about the environment. The result also showed that there was no significant relationship between students' socio-economic characteristics and their environmental awareness and attitudes at  $p > 0.05$ . This implied that socio-economic characteristics have no influence on students' environmental perception and awareness of the environment. This result is in line with Balakrishnan *et al.* (2020) who say the environmental sustainable development education in Malaysian higher education institutions played its significant role in educating undergraduate on environmental sustainability issue. This is also in line with Gregory's Theory of Perception (Hacker, 1991) and Theory of Instruction (Gagne and Dick, 1983) which claims that perception of an individual can be developed with the process of acquiring knowledge.

This result is in line with Niaura (2013) who stated that Respondents' gender, ethnicity, age, marital status and religious beliefs did not make a considerable impact on their environmental attitudes, awareness, intentions and actual behaviour.

**Table 2:** Relationship between socio-economic characteristics and their perception and awareness

Socio-economic	Gender	Marital Status	Age	Religion	Level	Nationality	Ethnicity
Relationship between socio-economic characteristics and Students' perception	1.023	2.654	5.050	2.077	4.127	5.457	3.978
Relationship between Socio-economic characteristics and Environmental awareness	0.881	0.265	0.070	0.413	0.553	0.084	0.546
	2	1	4	3	3	2	1
	0.227	2.124	3155	2.117	3.313	1.253	1.238
	2	1	4	3	3	2	1
	0.111	1.006	0.870	0.411	0.553	0.084	0.546

Field Survey (2022), Significant at  $p < 0.05$

**Correlation between students' environmental awareness and attitudes/behaviour towards the environment**

Table 3 showed that there is significant correlation between environmental awareness and attitudes of students at  $p < 0.05$ . This could be because environmental attitude is largely supported by environmental knowledge and environmental awareness. This result is in line with Ugulu *et al.* (2013) who observed that student attitude affect their behaviour, particularly their choice of action and persistence to give decisions.

**Table 3:** Correlation between environmental awareness and attitudes of students – Correlation

	$X^2$	Df	P	Decision
Correlation between environmental awareness and attitudes of students	0.277	3	0.000*	Significant

\* = Significant at  $p < 0.05$ ,  $X^2$ =Chi-Square, Df= Degree of freedom, **Source:** Field Survey, (2022)

**CONCLUSION AND RECOMMENDATION**

The study concluded that environmental awareness has a powerful impact on environmental attitudes and behaviour of the students of the College of Humanities and Culture, Osun State University, Nigeria. Religion, age, gender and ethnicity were found not to influence environmental attitudes and perceptions of the students towards the environment. Environmental awareness was identified as the determinant of environmental attitudes and behaviour of the students. This study recommended that environmental studies, degradation and conservation should be incorporated into student's curriculum to improve their positive behaviour towards the environment.

**REFERENCES**

Arcury, T.A. 1990. Environmental attitude and environmental knowledge. *Human Organization* 49 (4), 300-304.

Balakrishnan, B., Tochinai, F. and Kanemitsu, H. (2020). Perceptions and Attitudes towards Sustainable Development among Malaysian Undergraduates. *International Journal of Higher Education*, 9 (1):44-51.

Chen, C. C., (2010). *Spatial inequality in municipal solid waste disposal across regions In developing countries. International Journal of Environmental Science and Technology* 7 (3), 447-456.

Diaw, K., Blay, D. and Adu, A. (2002). Socio-economic survey of forest fringe communities: Krokosua Hills forest Reserve. A report submitted to the forestry Research, 16, 216-236.

Gagne, R. M., and Dick, W. (1983). *Instructional psychology. Annual review of psychology*, 34(1),261-295.

Gigliotti, L. M. (1992). Environmental attitudes: 20 years of change? *The Journal of Environmental Education* 24(1), 15–26.

Hacker, P. M. S. (1991). Experimental Methods and Conceptual Confusion: An Investigation into R. L. Gregory's Theory of Perception. *Iyyun: The Jerusalem Philosophical Quarterly*, 40, 289–314.

Hayta, A. B. (2006). Çevre kirliliğinin önlenmesinde ailenin yeri ve önemi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 7(2)

Niaura, A., (2013). Using the Theory of Planned Behavior to Investigate the Determinants of Environmental Behavior among Youth. *Environmental Research, Engineering and Management*, 1(63): 74-81.

Nouri, J.; Karbassi, A. R.; Mirkia, S., (2008). Environmental management of coastal regions in the Caspian Sea. *International Journal of Environmental Science and Technology* 5 (1), 43-52 (10 pages).

- Oğuz, D., Cakci, I. and Kavas, S. (2010). Environmental awareness of University Students in Ankara, Turkey. *African Journal of Agricultural Research* Vol. 5(19), pp. 2629-2636.
- Praneetham, C., Thiengkamol, N., Thathong, K. and Thiengkamol, T. (2012). Factors Affecting Villagers Participation in Community Environment Development. *Mediterranean Journal of Social Sciences*, 3(11), 535-540.
- Thapa, B. (1999). Environmentalism: A study of undergraduate students. *Proceeding of the 1999 northeastern recreation research symposium*. April 11-14, 1999. Bolton ,New York. The Pennsylvania State University, 41-50 (12pages).
- Ugulu, I., Akkaya, Z. and Erkol, S. (2013). An investigation on environmental attitudes of gifted students and the assessments in terms of some demographic variables. *e-Journal of New World Sciences Academy*, 8(4):400-410.
- Uğulu, İ., and Erkol, S. (2013). Biyoloji Öğretmen Adaylarının Çevreye Yönelik Tutumları Değişkenler Açısından İncelenmesi. *NWSA: Education Sciences*, 8(1), 79-89.
- UN-HABITAT (2014). Structure Plan for Ikire and Environs 2014-2033, Ministry of Lands and Physical Planning and Urban Development.
- Yardımcı, E., and Kılıç, G. B. (2010). Çocukların gözünden çevre ve çevre sorunları. *İlköğretim* , 9 (3): 1122-1136.
- Yılmaz, A., Morgil, F. İ., Aktuğ, P., and Göbekli, İ. (2002). Ortaöğretim ve üniversite öğrencilerinin çevre, çevre kavramları, ve sorunları konusundaki bilgileri öneriler. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 22: 156-162.