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Environmental Educational Practices

Membership of environmental clubs impacts students' awareness and understanding of environmental problems, knowledge and connectedness to nature

A adesão a clubes ambientais impacta a conscientização e a compreensão dos alunos sobre os problemas ambientais, o conhecimento e a conexão com a natureza

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ABSTRACT

The study examined the impact of environmental clubs on secondary schools' students with the aim of determining students' awareness of environmental problems, knowledge and connectedness to nature. It is a cross-sectional survey. A structured, self-administered questionnaire was used. Seven (7) public schools were randomly selected for this study. A total of 457 students of public schools who were both members (313) and non-members (144) of environmental conservation clubs were surveyed in Akure. Data were analyzed descriptively while the hypothesis was tested with independent- test and simple linear regression. Level of awareness of environmental problems among the students was higher with members of environmental conservation clubs having higher level of awareness than non-members. It also revealed that the respondents' knowledge about nature was low and were more knowledgeable on the latest method of biodiversity conservation (297 respondents), State bird of Nigeria (265 respondents), and what is biodiversity (255). Members of environmental conservation clubs also had higher knowledge about nature than non-members. The respondents' connectedness to nature was very high, members of conservation clubs had higher levels of connectedness to nature than non-members. The study suggests that students' membership of environmental clubs impacts positively on their awareness of environmental problems, knowledge and connectedness to nature. It is recommended that the role of environmental clubs is made more

relevant within the curriculum so as to empower students' with skills to promote more environmental awareness, knowledge and connectedness to nature.

Keywords: Connectedness; Environmental clubs; Knowledge; Nature

RESUMO

O estudo examinou o impacto dos clubes ambientais nos alunos do ensino secundário com o objetivo de determinar a conscientização dos alunos sobre os problemas ambientais, o conhecimento e a ligação à natureza. É uma pesquisa transversal. Foi utilizado um questionário estruturado e autoaplicável. Sete (7) escolas públicas foram selecionadas aleatoriamente para este estudo. Um total de 457 estudantes de escolas públicas que eram membros (313) e não membros (144) de clubes de conservação ambiental foram entrevistados em Akure. Os dados foram analisados descritivamente enquanto a hipótese foi testada com teste independente e regressão linear simples. O nível de consciência dos problemas ambientais entre os estudantes foi maior, com os membros dos clubes de conservação ambiental tendo um nível de consciência mais elevado do que os não membros. Revelou também que o conhecimento dos inquiridos sobre a natureza era baixo e tinham mais conhecimentos sobre o método mais recente de conservação da biodiversidade (297 inquiridos), sobre as aves do Estado da Nigéria (265 inquiridos) e sobre o que é a biodiversidade (255). Os membros dos clubes de conservação ambiental também tinham maior conhecimento sobre a natureza do que os não membros. A ligação dos inquiridos à natureza foi muito elevada, os membros dos clubes de conservação apresentaram níveis mais elevados de ligação à natureza do que os não membros. O estudo sugere que a adesão dos estudantes a clubes ambientais tem um impacto positivo na sua consciência dos problemas ambientais, no conhecimento e na ligação à natureza. Recomenda-se que o papel dos clubes ambientais se torne mais relevante no currículo, de modo a capacitar os alunos com competências para promover mais consciência ambiental, conhecimento e ligação à natureza.

Palavras-chave: Conectividade; Clubes ambientais; Conhecimento; Natureza

1 INTRODUCTION

Nature and its vital contributions to people, which together embody biodiversity and ecosystem functions and services, are deteriorating worldwide according to the Intergovermental Panel on Biodiversity and Ecosystem Services (IPBES, 2019). Using the data from 20,811 populations of 4,392 species, the 2020 WWF global Living Planet Index shows an average 68% decline in monitored populations between 1970 and 2016 (range: -73% to -62%) (WWF, 2020). Environmental conservation issues are of greater concern globally as nature is being transformed and degraded due to population growth and unabated

anthropogenic activities. According to Rogayan (2019), the earth is now suffering from innumerable afflictions at present caused by egregious human activities that relentlessly denuding the environment. Balancing human needs with that of the environment is taking a significant and prominence concern among the policy makers and conservationists worldwide.

As environmental conservation becomes an issue of urgent concern, the role of environmental education becomes imperative (Kioko *et al.,* 2010). Environmental education aims to transform human behaviour into nature-friendly actions and promote environmentally aware decision-making (Kiprono *et al.,* 2021). Without environmental education, humans would continue to act in a way not consistent with nature sustainability. To sustain our planet, environmental education that is aimed at promoting nature's awareness, knowledge, positive attitudes and behaviours is very imperative, particularly among the youth and school children. According to Laddawan and Joan (1987), secondary school children are the key to environmental education because they are at an age when important attitudes can be formed and encouraged, and thus environmental education could be expected to have maximum impact on secondary schools students.

Awareness towards critical issues in environment has gained much of attention worldwide. Inadequate conservation and environmental awareness and knowledge is heightening biodiversity degradation and loss. Many debates and discussion have been carried out either locally or globally to find the best solution or approach to solve environmental problems (Gambro and Switzky, 1996). As for a developing country like Nigeria, development is still progressing rapidly especially in technology and industries. Although, environmental sustainability is highlighted in many policies and regulations, yet the right values towards environment is always neglected when it comes to actions (Murphy, 2002). In an attempt to promote environmental conservation and sustainable practices among the youth, environmental conservation clubs are gaining wide acceptance in secondary schools. Conservation clubs are now environmental education tool through which

environmental knowledge is enhanced since topics not covered in the classrooms are addressed without following the rigidity of school curriculum. Hart and Roger (1997) opined that the secondary school club in particular provides exciting opportunities for children to explore their connection with the environment in a peer-oriented setting, giving them a sense of ownership and stewardship. Voluntary eco-clubs are the best ways of teaching the young about environmental issues (Meseret, 2016).

Schools are very critical to the development of environmentally aware and ecologically conscious individuals. In Nigeria, extra-curricular activities have been an integral part of secondary education. In fact, a day of the week is set aside for various club activities, including environmental clubs. Students are made to compulsorily belong to a club. Environmental conservation clubs are one of the very prominent clubs and their activities are aimed at effectively promoting, disseminating and encouraging positive attitudes and behaviours that promote conservation of plants and animals, as well as addressing other environmental problems. With environmental and conservation problems currently facing humanity, and considering that the future of the planet lies in the hands of the young ones, research on the impacts of environmental clubs on awareness of environmental problems, knowledge and connectedness to nature has become relevant. According to Hadzigeorgiou (2012), awareness facilitates a shift or change in perspective, which is a prerequisite for significant learning.

Studies have found significant relationships between environmental clubs' activities, gender, and the promotion of awareness of environment problems and knowledge. For instance, Kiprono *et al.* (2017) found that there exist significant relationship between wildlife Clubs of Kenya activities and the promotion of awareness of wildlife conservation education.

Over the years, adults have been the main focus of environmental conservation research, there has been few environmental research on young ones (Larson *et al.,* 2010, Keith *et al.,* 2021) and most of the studies on environmental

awareness and knowledge were done in developed countries (Gakuo, 2010). The study addressed 1) level of students' membership and participation in environmental clubs, 2) students' awareness of and understanding of environmental problems, 3) students' knowledge and connectedness to nature. It was hypothesized that 1) there is no statistically significant difference between members of conservation clubs and non-members level of awareness of environmental problems, knowledge about nature, and connectedness to nature 2) there is no statistically significance difference between male and female awareness of environmental problems, knowledge about nature, and connectedness to nature, and 3) there is no statistically significant relationship between students' awareness of environmental problems, knowledge about nature, connectedness to nature, and their membership of environmental conservation clubs.

2 MATERIALS AND METHODS

The study was carried out in secondary schools in Akure South Local Government area of Ondo State, Nigeria. Akure lies between Longitude 05° 06'E to 05° 38'E and between Latitude 07°07' N to 07°37' N. The rapid growth of the city, particularly in the last few decades has made it one of the fastest growing metropolitan areas in south- western Nigeria. Its population is about 353,211 as at 2006 (Nigeria Population Commission, 2006). The vegetation is tropical rainforest and drained by River Ala and its tributaries (Uluocha and Ekop, 2002).

The climatic condition of Akure South follows the pattern of southwestern Nigeria where the climate is influenced mainly by the rain- bearing southwest monsoon winds of the ocean and dry northwest winds from the Sahara Desert (Abraham *et al.,* 2001). Akure experiences a warm- humid tropical climate, with two distinct seasons, the wet (rainy) and dry (harmattan) seasons. The rainy season lasts for about seven months (from April to October), while the harmattan is between November and March. The harmattan season, which is associated with

haze, poor visibility and a prevalence of cold, cough, catarrh and conjunctivitis (an eye dis ease) in Nigeria, is extremely hot during the daytime and harshly cold at night time. Akure records an average rainfall of about 1500 mm per annum. Monthly average temperatures range between 21.4 and 31.1°C, and its mean annual relative humidity is about 77.1 %. Bush tailed porcupine (*Atherus africanus),* Manatee (*Tricherus senegalensis*), Aardvark (*Oryteropodidae afer)*, Giant pangolin (*Manis gigantean).* The flora species found in the study area include *Newbouldia laevis, Aframomun melegueta, Cola acuminata, Melicia excelsa* (Obata and Aigbokhan, 2012).

3 METHODS

The population of the study was students in the selected secondary schools in Akure North Local Government Area of Ondo State and comprised of Junior Secondary School 1-3 and Senior Secondary School 1-3. The total number of respondents was 457, consisting 313 members of environmental conservation clubs and 144 that were not members of environmental conservation clubs. The instrument for data collection was questionnaire. The questionnaire asked students to rate the level of their awareness of environmental problems, knowledge about nature, and connectedness to nature. The level of awareness was rated as 4=greater extent, 3=moderate extent, 2=slightly extent, and 1=not at all. Knowledge about nature questions were adapted from Anu (2014) test for measuring the knowledge in biodiversity of secondary school students and Wisconsin High School Environmental Survey (1994). It was multiple choice type questions, students' responses were rated as 1=correct and 0= incorrect. Connectedness to nature was measured using Mayer and Frantz (2004) connectedness to nature measures and was rated as 5=strongly agree, 4=agree, 3=neutral, 2=disagree, and 4=strongly disagree. Reliability of the instrument was determined using Cronbach's (1951) method. Thus, for awareness of

environmental problems Cronbach's Alpha coefficient was 0.74, Knowledge about nature was 0.85 while Connectedness to nature was 0.94.

Prior to the commencement of the administration of questionnaires, permissions were obtained from the Principals of the selected schools for access to the school and students' participation were sought and approval granted. Students in each class were randomly selected by the researcher for the study. In each class, the questionnaire was administered to students including members and non-members of environmental conservation clubs in examination type conditions under the supervision of the researcher. The data collected were analysed and presented descriptively using mean, standard deviation, frequency, percentage, and graphs. Hypothesis was tested using independent t-test and simple linear regression.

4 RESULTS AND DISCUSSION

1.1 Socio-demographic Characteristics of Respondents

Table 1 reveals that 60.2% of the respondents were male while 39.8% were female which might be due to higher number of male enrolment than female in the schools sampled. This finding is in consistent with Ogunjinmi *et al.* (2015) who recorded more male (63.7%) than female (36.3%) students. Furthermore, majority of the respondents fall within the age group of 8-14, this agrees with Ogunjinmi *et al.* (2015) who recorded age group of 12-15 years. This is an indication that majority of the respondents were teenagers.

In addition, most respondents (26.0%) were in Senior Secondary 1 while the least were in Senior Secondary 3 (3.3%). In addition, 56.9% belong to age group of 8-14 years while 43.1% were in 15-24 years. Also, 72.9% of the respondents' stated that their parents belong to average wealth class.

Table 1–Demographic characteristics of respondents (n=457)

Demographic characteristics	Frequency	Percentage
Sex		
Male	275	60.2
Female	182	39.8
Age		
8-14	260	56.9
15-24	197	43.1
Class		
JSS1	50	10.9
JSS2	80	17.5
JSS3	96	21.0
SS1	119	26.0
SS2	97	21.2
SS3	15	3.3

Source: elaborated by the authors

1.2 Membership and Participation in Environmental Conservation Clubs by Respondents

Table 3 shows that 68.5% of the respondents were members of environmental conservation clubs while 31.5% were non- members. This is in contrast to Toili (2007) who reported 10.3% of the students as members of environmental based clubs. Also, 40.7% participates regularly, 28.0% participates occasionally and 31.3% do not participate at all. This is inconsistent were members of wildlife/environmental clubs (Kioko *et al.,* 2010). This is in agreement with Toili (2007) that indicates that students' participated in activities through environmental based clubs named wildlife clubs of Kenya.

Table 2–Membership and participation in environmental conservation clubs by respondents (n=457)

Variables	Frequency	Percentage
Belong to environmental conservation clubs		
Yes	313	68.5
No	144	31.5
Participate in environmental conservation club activities		
Yes	313	68.5
No	144	31.5
Level of participation in environmental conservation club activities		
Regularly	186	40.5
Occasionally	128	28.0
Not at all	143	31.5

Source: elaborated by the authors

1.3 Respondents' Awareness and Understanding of Environmental Problems

The respondents' level of awareness of environmental problems is presented in Table 3. The means level of awareness of environmental problems ranged from 2.18 to 3.46. Pollution was the environmental problem aware by majority of the respondents with a mean of 3.46 while the least was Acid rain with a mean of 2.18. The findings also show that 113 of the total respondents (457) were very aware of environmental problems, 232 had high awareness, 97 medium awareness, and 15 had low awareness. This suggests that the students have high level of awareness of environmental issues. This is in agreement with Rogayan and Nebrida (2019) who reported that students were very aware of environmental issues and problems. This is also in line with Maharaj-Sharma (2015) who reported students were much aware of issues that affecting the environment and practices that are detrimental to the environment.

Table 3 – Respondents' level of awareness of environmental problems (n=457)

Variable	Mean	Standard Deviation
Pollution	3.46	0.775
Global warming	2.93	0.923
Over population	3.37	0.773
Natural resource depletion	2.91	0.903
Waste disposal	3.21	0.843
Climate change	2.88	0.863
Loss of biodiversity	2.55	0.977
Deforestation	2.83	1.017
Ocean acidification	2.30	1.079
Ozone layer depletion	2.63	2.632
Acid rain	2.18	1.087
Urban sprawl and sanitation	2.46	0.988
Awareness categories		
Very high = 38-48	113	
High = 30-38	232	
Medium = 21-29	97	
Low = 12-20	15	
Mean awareness score for members of conservation clubs	34.77	
Mean awareness score for non-members of conservation clubs	31.34	
Independent t-test value	4.87**	

Rated as greater extent, moderate extent, slight extent, Not at all
**P<0.01

This is also consistent with Burke (2017) and Okumu (2020) who reported high level of environmental awareness. There was significant difference in level of awareness of environmental problems between members and non-members with members having higher mean (mean=34.77) and non-members (mean=31.34) (t=4.87, p<0.01). Furthermore, 40.0% of the respondents had average understanding of issues

relating to the environment (Figure 1). This is an indication that large percentage of the students had an average understanding of environmental issues.

1.4 Respondents' Knowledge about Nature

In Table 5, respondents' knowledge about nature is presented. It shows that the respondents were more most knowledgeable on 'the latest method of biodiversity conservation with total correct score of 297 which represent 65% of the total number of respondents, this was followed by knowledge on the State bird of Nigeria with a total correct scores of 269 representing 58.9%, and what biodiversity means with total correct score of 255 also representing 55.8%.

Figure 1 – Respondents' understanding of environmental issues (%)
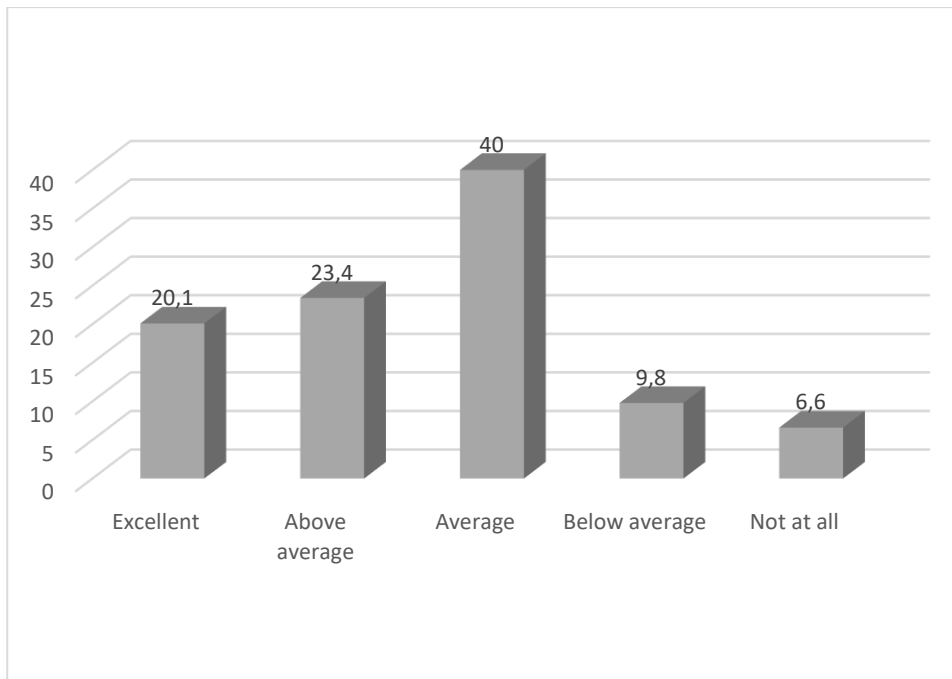
Source: Elaboreted by the authors

Out of the 27 items, the members of environmental conservation clubs had higher percentage of correct answers in 20 items while non-members had higher percentage in seven (7) items. This thus indicated that members of environmental conservation clubs had higher knowledge about nature. Findings also showed that the students' knowledge about nature was

low with majority having less than average correct scores. This disagrees with Erhabor and Don (2016) who observed that students have adequate knowledge on the environment. It is also inconsistent with Harun *et al.* (2011) who observed that form 4 students demonstrated good level of knowledge of the environment. There is significant difference between members and non-members knowledge about nature with members of environmental conservation clubs having higher knowledge score (mean=10.74) than non-members (mean=9.60) (t=3.36, p<0.01). This implies that membership of environmental conservation clubs confers higher knowledge about nature on the students than non-members.

Table 4 – Knowledge about nature by students' members and non-members of environmental conservation clubs'

(to be continued)

Questions on nature	Members		Non-members			
	No of correct answers	% correct answers	No of correct answers	% correct answers	Overall correct answers	Overall % correct answers
What is biodiversity?	179	57.2	76	52.8	255	55.8
Major reason for biodiversity depletion is ………….	112	35.8	35	24.0	147	32.2
The most affluent species existing among living beings is ………	110	35.1	68	47.2	178	38.9
What is GREEN PEACE?	97	31.0	39	27.1	136	29.8
What is the latest method of biodiversity conservation?	224	71.6	73	50.7	297	65.0
What is sustainable development?	145	46.3	62	43.1	207	45.3
The place in which organisms are conserved in their natural habitat is…….	104	33.2	60	41.7	164	35.9
What is the aim of celebrating earth hour?	84	26.8	63	43.8	147	32.2
The place in which organisms are conserved in their natural habitat is…….	104	33.2	60	41.7	164	35.9

Table 4 – Knowledge about nature by students' members and non-members of environmental conservation clubs'

(To be continued)

Questions on nature	Members		Non-members			
	No of correct answers	% correct answers	No of correct answers	% correct answers	Overall correct answers	Overall % correct answers
What is the aim of celebrating earth hour?	84	26.8	63	43.8	147	32.2
What is Hippo?	145	46.3	58	40.3	203	44.4
In which among the following countries is the lion share of the forest lie………	106	33.9	53	36.8	159	34.8
What is Kyoto protocol meant for?	109	34.8	56	38.9	165	36.1
Which of this place is more in number of native species and is facing habitat destruction?	121	38.7	45	31.3	166	36.3
Which is the world famous book that deal with the disastrous effect of DDT?	142	45.4	74	51.4	216	47.3

Table 4 – Knowledge about nature by students' members and non-members of environmental conservation clubs'

Questions on nature	Members		Non-members			
	No of correct answers	% correct answers	No of correct answers	% correct answers	Overall correct answers	Overall % correct answers
Which is the state bird of Nigeria	195	62.3	74	51.4	269	58.9
How many national parks do we have in Nigeria?	133	42.5	57	39.6	190	41.6
The first national park in Nigeria is ……	83	26.5	23	16.0	106	23.2
Gorilla is endemic to which in state Nigeria?	148	47.3	53	36.8	201	44.0
Food web consist of…	148	47.3	65	45.1	213	46.6
When two or more species attempt to use the same limited resources in an ecosystem, the interaction is called…..	145	46.3	51	35.4	196	42.9
The process of photosynthesis in green plants is ---	148	47.3	52	36.1	200	43.8
All of the individual organisms that live on the ground in a particular forest share the same…………	109	34.8	37	25.7	146	31.9

Table 4 – Knowledge about nature by students' members and non-members of environmental conservation clubs'

(to be continued)

Questions on nature	Members		Non-members			
	No of correct answers	% correct answers	No of correct answers	% correct answers	Overall correct answers	Overall % correct answers
The term used to describe all the natural living and non-living interacting features of a given area is ………	118	37.7	27	18.8	144	31.5
A particular aquatic ecosystem is contaminated by chemical which tends to remain stored in the body fat. The highest concentration of this chemical would most likely to be found in which group of organisms in the ecosystem?	41	13.1	22	15.3	63	13.8
Which phrase refers to the potential ability of a system to support population growth without harming the environment?	103	32.9	39	27.1	142	31.1
If carbon dioxide disappeared from the atmosphere, what would be affected first?	134	42.8	37	25.7	171	37.4

Table 4 – Knowledge about nature by students' members and non-members of environmental conservation clubs'

(Conclusion)

Questions on nature	Members		Non-members			
	No of correct answers	% correct answers	No of correct answers	% correct answers	Overall correct answers	Overall % correct answers
What acts as shield against ultraviolet rays in the upper atmosphere?	127	40.6	51	35.4	178	38.9
Mean knowledge score for members of conservation clubs					10.74	
Mean knowledge score for non-members of conservation clubs					9.60	
Independent t-test value					3.36**	

Knowledge score rated a correct=1, incorrect =0 **$P<0.01$

Source: elaborated by the authors

1.5 Respondents' Connectedness to Nature

The respondents' connectedness to nature is presented in Table 5. The mean of connectedness to nature ranged from 3.14 to 4.04. The highest mean was for "I often feel a sense of oneness with the natural world around me" (mean= 4.04) while the least was "I often feel disconnected from nature" (mean=3.14). From the findings, majority of the members of environmental conservation clubs had a very high and high connectedness to nature with 246 and 67 respondents respectively while for non-members, 64 and 76 respondents had a very high and high connectedness to nature respectively. The study thus indicated very high

connectedness to nature among the students. This is in agreement with Johnson-Pynn *et al.* (2014) who reported that wildlife clubs of Uganda members/participants rated their connectedness to nature as being strong. Connectedness to nature in this study was higher than what was reported by Keith *et al.* (2021). Furthermore, the result shows that there is statistically significant difference between connectedness to nature of members of environmental conservation clubs and non-members with members having higher means of connectedness to nature (mean=45.69) than non-members (means=39.75) (t=9.11, p<0.01). This implies that membership of environmental conservation clubs impacts positively on students' connectedness to nature.

Table 5 – Connectedness to nature by students' members and non-members of environmental conservation clubs

(to be continued)

Variables	Members		Non-members	
	Mean	Standard Deviation	Mean	Standard Deviation
I often feel a sense of oneness with the natural world around me	4.16	1.02	3.77	1.10
I think of the natural world as a community which I belong	4.18	0.76	3.66	0.96
I recognize and appreciate the intelligence of other living organisms	4.11	0.94	3.49	0.97
I often feel disconnected from nature	3.16	1.27	3.10	1.04
When I think of my life, I imagine myself to be part of larger cyclical process of living	3.88	1.01	3.35	1.11
I often feel a kinship with animals and plants	3.34	1.33	3.19	1.06
I feel as though I belong to the Earth as equally as it belongs to me	3.84	1.12	3.22	1.09

Table 5 – Connectedness to nature by students' members and non-members of environmental conservation clubs

(Conclusion)

Variables	Members		Non-members	
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**
I have a deep understanding of how my actions affect the natural world	3.76	1.13	3.20	1.14
I often feel part of the web of life	3.64	1.07	3.19	1.08
I feel that all inhabitants of Earth, human and nonhuman share a common life force	3.79	1.07	3.26	1.08
Like a tree can be part of a forest, I feel embedded with the broader natural world	3.85	1.00	3.25	1.05
When I think of my place on Earth, I consider myself to be top member of the hierarchy that exist in nature	3.98	1.06	3.07	1.16
Level of Connected to Nature				
Very High = 41-60	246		64	
High = 25-40	67		76	
Medium = 12-24	0		4	
Mean connectedness to nature for members of conservation clubs	45.69			
Mean connectedness to nature for non-members of conservation clubs	39.75			
Independent t-test value	9.11**			

Rated as 5= Strongly agree, 4=Agree, 3=Undecided, 2=Disagree, 1=Strongly disagree **$P<0.01$

Source: elaborated by the authors

1.6 Relationship between Membership of Environmental Conservation Clubs and Students Awareness of Environmental Problems, Knowledge and Connectedness to Nature

The impacts of students' membership of environmental conservation clubs on awareness of environmental problems, knowledge about nature and connectedness to nature were computed. For awareness of environmental problems, the coefficient of determination was 0.78, therefore, about 78.0% of the variation in the students' environmental awareness is explained by their membership of environmental conservation clubs. In addition, for students' knowledge about nature, the coefficient of determination is 0.68, thus, 68.0% of the variation in students' knowledge about nature is explained membership by membership of environmental clubs.

Table 6 – Relationship between students' level of awareness, knowledge and connectedness to nature, and membership of environmental conservation clubs

Dependent variables	Membership of environmental conservation clubs (t-value)	R	R^2	Adjusted R^2
Level of awareness of environmental problems	4.87**	0.80	0.78	0.76
Knowledge about nature	3.36**	0.70	0.68	0.65
Connectedness to nature	9.11**	0.95	0.92	0.91

**P<0.01

Source: elaborated by the authors

Furthermore, with regard to students' connectedness to nature, the coefficient of determination is 0.92, therefore, about 92.0% of the variation in the students' connectedness to nature is explained by membership of environmental conservation clubs. There is thus enough evidence that membership of

environmental conservation clubs is useful in predicting students' awareness of environmental problems, their knowledge about nature and connectedness to nature. This is consistent with Kioko *et al* (2010) who reported that club membership is positively affects general attitude and knowledge of conservation related topics.

CONCLUSIONS

Clubs, particularly, environmental conservation clubs are important part of Nigeria's educational system. The study revealed that large percentage of secondary school students were members of environmental conservation clubs. Among the selected students, there was high awareness of environmental problems with members of environmental conservation clubs having higher awareness than non-members. Generally, students' knowledge about nature was low, however, members of environmental conservation clubs had higher knowledge about nature than non-members. Furthermore, students' connectedness to nature was very high, members of environmental conservation clubs had higher levels of connectedness to nature. The study thus suggests that environmental conservation clubs influences students awareness of environmental problems, knowledge about nature, and connectedness to nature. It is important that the environmental conservation clubs should develop nature conservation programs and activities that could enhance students' learning about nature and thus facilitates the enhancement of knowledge about nature. In addition, the role of environmental clubs should be made more relevant within the curriculum so as to empower students' with skills to promote more environmental awareness, knowledge and connectedness to nature.

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