

Green Office and Environmental Sustainability in Tertiary Institutions in Rivers State

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Abstract

The study investigated green office and environmental sustainability in Tertiary Institutions in Rivers State. The correlational research design was adopted for the study. The population for the study was 250 which consisted of office staff working in tertiary institutions in Rivers State. The tertiary institutions were Capt. Elechi Amadi Polytechnic, Rumuola, Ken Saro Wiwa Polytechnic, Bori, Rivers State University, Ignatius Ajuru University of Education, Rivers State College of Health Technology. A total population of 250 office staff drawn from the offices of Heads of departments, deans, bursar, rector/VCs offices, directors and other principal officers in tertiary institutions in Rivers State were the respondents. The sample size of 200 representing 90% of the total population was used. The stratified sampling technique in which 30 office staff were drawn from each of the tertiary institutions under investigation. The instrument used for data collection was questionnaire. Out of the 250 copies of the questionnaire distributed, 200 or 95% were duly returned and completed upon which the study based its analysis. Mean and standard deviation were used to answer the research questions at the mean benchmark of 2.5 while Pearson Product Correlation Coefficient was used to test the null hypotheses at .05 significance level. The study concluded that that there are no adequate preparations or methods put in tertiary institutions in Rivers State to attain green office or environmental friendliness. The study recommended among others that Management of tertiary institutions in Rivers State should commence tree planting near office buildings in their various campuses and training and retraining of staff in that regard.

Keywords: Green Office, Environment, Sustainability, Tertiary Institutions, Internet, Rivers State.

Introduction

The need for environmentally friendly operations including office services is in the increase. The clamour for climate change and environmental sustainability gave rise to the concept of green office. The Green office started in the 1990s and achieved popularity in the office profession around 2003. It is a recent trend involving buildings for green offices, the greening of existing university offices, the implementation of green services, and the introduction of practices for sustainable and environmentally friendly office sand e-resourcing.

To make secure and effective sustainable offices, the environment and the economy are two critical aspects. In the field of sustainability, three main initiatives are in place, social growth, ecological sustainability and economic sustainability are included, fulfilling the need for green offices and making them eco-friendly since a green environment is required

by all society. There are several criteria in the creation of the green office in the present scenario (Jones, 2016).

Green office is a work environment in which the use of paper is eliminated or greatly reduced. This is done by converting documents and other papers into digital form, a process known as digitization. Proponents claim that "going green" can save money, boost productivity, save space, make documentation and information sharing easier, keep personal information more secure, and help the environment. The concept can be extended to communications outside the office as well. The green world was a publicist's slogan, intended to describe the office of the future. It was facilitated by the popularization of video display computer terminals like the 1964 IBM 2260. An early prediction of the green office was made in a 1975 (Fourie, 2012)

The idea was that office automation would make paper redundant for routine tasks such as record-keeping and bookkeeping, and it came to prominence with the introduction of the personal computer. While the prediction of a PC on every desk was remarkably prophetic, the "green office" was not. Improvements in printers and photocopiers made it much easier to reproduce documents in bulk, causing the worldwide use of office paper to more than double from 1980 to 2000.

This was attributed to the increased ease of document production and widespread use of electronic communication, which resulted in users receiving large numbers of documents that were often printed out. However, since about 2000, at least in the US, the use of office paper has leveled off and is now decreasing, which has been attributed to a generation shift; younger people are believed to be less inclined to print out documents, and more inclined to read them on a full-color interactive display screen (Nweke, 2018). According to the United States Environmental Protection Agency, the average office worker generates approximately two pounds of paper and paperboard products each day.

Statement of the Problem

Offices are not only repositories of knowledge or business activities, but are also important information resources for raising awareness about environmental concerns. Green offices educate the public about environmental issues through their collections, sustainable and environmentally friendly facilities, and public office programs. There is hardly any hard-copy paper document that will not be burnt into the atmosphere. Our beautiful nature is continuously degraded by human beings and causing problems like global warming and climate change. The impunity of 'paperiness' has continued to slow office processes and operations with its attendant internet exclusion. Wide ranges in temperature, unpredictable rainfall, storms, provide evidence that something is happening with our climate. Offices hardly come into thoughts when we think of problems like global warming and climate change. But offices consume a lot of energy for its services and hence contribute to the problem. A healthy natural environment is needed for our survival and quality of life and knowledge seeking. The study suspects that there is enough preparation by offices in tertiary institutions in Rivers State to align office services to the enormous

challenges posed by climatic change and global warming. It is possible to design a green office by means of choosing appropriate site for constructing office building, use of natural material and transmission of information services electronically (internet) to reduce the tendencies of the offices contributing to global climatic issues. It has been observed that most archived information gets burnt after several years, thereby contributing to climatic change challenge. The need for electronic resourcing and environmental sustainability is therefore base of investigation of this study.

Aim and Objectives of the Study

The aim of the study was to investigate green office and environmental sustainability in tertiary institutions in Rivers State; with the following specific objectives:

1. To determine the relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State.
2. To examine the relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State.
3. To investigate the relationship between ability to use the internet and environmental sustainability in tertiary institutions in Rivers State

Research Questions

The following research questions guided the study:

1. How does e-resourcing relate to environmental sustainability in state tertiary institutions in Rivers State?
2. How does natural environment relate to environmental sustainability in state tertiary institutions in Rivers State?
3. How does the ability to use the internet relate to environmental sustainability in tertiary institutions in Rivers State?

Null Hypotheses

The following null hypotheses guided the study:

1. There is no significant relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State.
2. There is no significant relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State.
3. There is no significant relationship between ability to use the internet and environmental sustainability in tertiary institutions in Rivers State

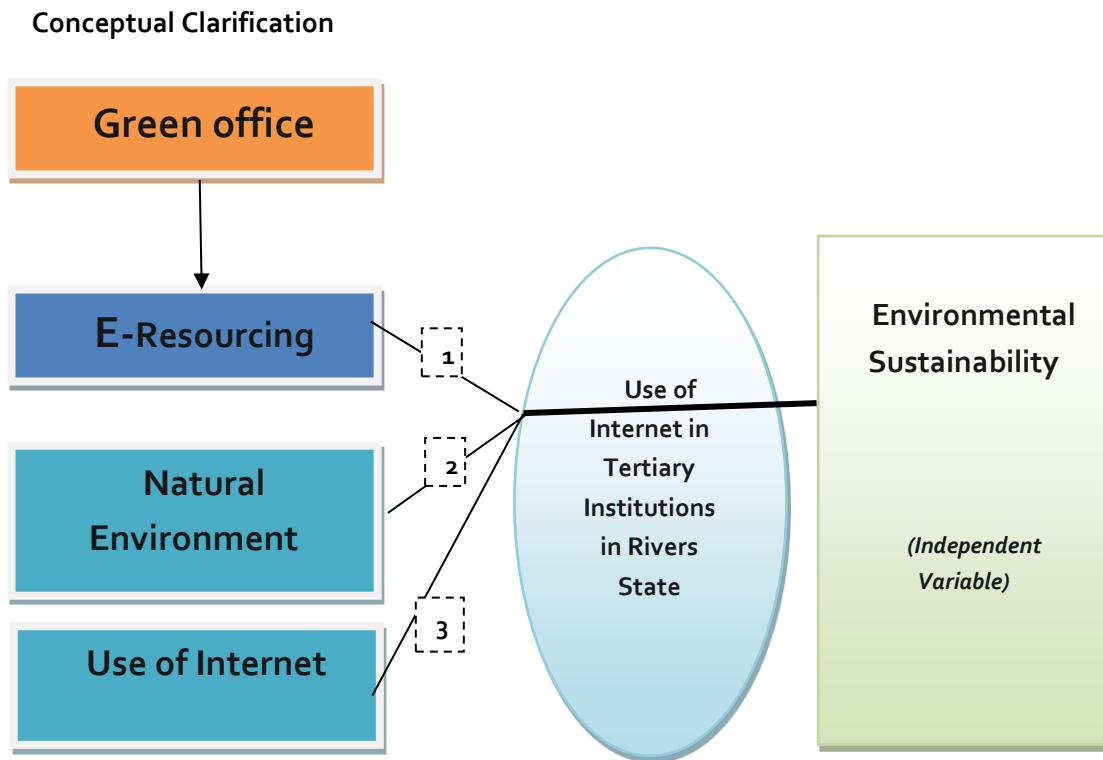


Fig. 1: Researchers' Guide, 2024

Concept of Green Office

Khan and Porel (2020) expressed that the "Green office" was represented in 2000 by the LEED rating and spread-out green office operations in certain areas. The initiatives to turn the traditional office into a "Green office" were also examined. Jana (2020) Describes that semantic web tools are helpful to reduce the harmful effect of the natural environment that has become a part of green office maximum use of e- resource eliminating the paper documents. Nandi (2020) Express that green office concept, building construction, some green office agencies which provides certificate. This paper conducted the study of IIT Kharagpur Central office, adopted the green office initiatives in their own office building. The maximum of papers published in the Scopus database linked to In the Green office (2015 to 2019) and the minimum number of scientific web articles written.

Antonelli (2018) Examines the office in present scenario, office is taking a revolutionary movement and helping to reduce carbon footprint, reduce paper document, and maximum use of e- resources, use solar energy in office buildings also because environmental challenges are big issues now a days so offices are helping them to sustainability through green office. Kumar and Shah (2015) Describes that most necessary variable which is applicable in the green office project. Chakraborty (2013) Suggested that It is clear that the four renowned university offices in India are generally eco-friendly with elevated heights, dimensions, outdoor areas, high faced, use of sunshade, and natural light etc. analysis

shows the facts of the four major metropolises university offices with a traditional heritage structure shows scriptural / pictorial data and discussions.

Environmental Sustainability

On the threshold of the new millennium, Hauke (2019) formulated eight core values of office staffship and listed the following among them: stewardship, service, intellectual freedom, rationalism, literacy and learning, equity of access to recorded knowledge and information, privacy, and democracy (pp. 26–27). Several years later, he supplemented this catalogue of values with one more – the greater good, which he defined in the following manner: ‘the greater good is a communitarian principle that is the antithesis of the individualism, materialism, and selfishness that dominate early twenty-first-century’ (Gorman, 2015: 212). At the same time, he pointed out that office activities should benefit every member of the community and society (Gorman, 2015: 212). If we accept the statements of the authors of *The Common Good*, which Gorman refers to, that social systems, institutions and environments that work for the benefit of every human being constitute the common good, an office also constitutes part of this system (Andre and Velasquez, 1992; Gorman, 2015: 213). Therefore, it should be recognized that promoting knowledge, raising awareness, and educating about the negative human impact on the environment and methods to minimize it is an emanation of the ‘the greater good’ principle. We will all be beneficiaries of changes that will appear if we use resources of the surrounding environment more consciously.

Adopting the paradigm of structural functionalism, one should perceive a office as a social organism, consisting of elements, each of which contributes to the functioning of the whole. Therefore, it was recognized that all pro-environmental activities undertaken by offices must be implemented in various sectors and as a result of the involvement of employees of all departments. Only synergy in place of ad hoc, chaotic actions can contribute to the implementation of a new paradigm in office staffship, which is sustainable development. However, it cannot be achieved without conceptualizing the terms associated with this phenomenon (Fourie, 2012).

Natural Environment (Office Buildings) and Environmental Sustainability

A natural environment for office buildings often boils down to a green building, as suggested by Harri Sahavirta (2013). Associating a green office primarily with a green building and its convenient location results from the definition functioning in literature published in *Online Dictionary of office and Information Science*, nota bene, the only office science reference book known to the author which took this term into account. There, a green office is treated as a synonym for the concept of a sustainable office and defined as a office designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of resources (water, energy, paper), and responsible waste disposal (recycling, etc.).

This definition emphasizes the building and its administration, which is still reflected in contemporary literature in the field of office staffship, in which, when writing about pro-environmental activities of offices, the office building and its features are highlighted (McCook and Bossaler, 2018: 214; Meyer, 2008: 29). Meanwhile, in addition to a building, its equipment and location, a office, including a green office, also involves people (users, employees) and processes that take place there. Nweke, (2022) insists that natural environment would equally mean a physical office within trees and not excluding an internet ready-office, with minimal paper productions.

A broader approach to the term 'green office' is presented by theoreticians and practitioners of office staffship. George J. Aulisio (2013) pointed out that the concept of a green office cannot be limited to such a office that has a certified green building. In his opinion, the term 'green office' refers to 'any office that promotes sustainability through education, operation, and outreach' (p. 1). Petra Hauke (2019) pointed out that in addition to their buildings 'green offices also focus on services, activities, events, literature, and projects related to any kind of sustainability that follows the United Nations Agenda 2030, demonstrating the social role and responsibility of offices as leaders in sustainability education' (p. 1). In turn, Monica Antonelli (2008) claims that the process of greening offices is taking place 'by building green office buildings, by greening existing office facilities, providing green office services, and embracing environmentally supportive and sustainable practices within the office' (p. 1).

E-resourcing and Environmental Sustainability

It should be emphasized that the term e-resourcing which is a dimension of green office in the literature has often appeared in various contexts. Although no attempt was made to define this term, it was associated with processes, phenomena and activities that, as a consequence, minimize the negative impact of offices, users and office staffs on the electronic environment. For example, a green office has been linked to informational behaviour and the green society (Fourie, 2012), green buildings (Chakraborty, 2013; Tseng, 2008), placemaking (Oyelude, 2018), office collection and e-learning (Connel, 2010; Marcum, 2009), green publishing (Metz and Seadle, 2012) and recycling (Rickert, 2001). Various aspects of environmental sustainability of information systems and services were analysed by Gobinda Chowdhury (2012, 2013, 2014). In the context of the tasks carried out by offices, and the goals of green offices, the concept of a 'green information service' (IS) is important. Chowdhury (2012) points out that green IS 'should be designed to minimize greenhouse gas emissions throughout its lifecycle from content creation to distribution, access, use, and disposal' (p. 635). This reveals another aspect of the functioning of green offices, which aims at environmental sustainability.

Having analysed the attempts to define a 'green office', Harri Sahavirta (2018) indicates that the operational plan for environmentally aware offices should include:

- analysis of the environmental impact of a office building and office activities, followed by the development of an environmental strategy that will define measures and objectives of environmental activities,
- promoting recycling and sharing in own communities in different ways,
- guarantee of easy and open access to environmental information,
- increasing the community's environmental awareness by improving the skills of critical literacy, searching and presenting information, and ensuring equality in access to information (pp. 19–20).

There are only a few theoretical and definitive considerations regarding green office staffship. The term 'green office staffship' appeared in office science literature in the early 1990s. The author of one of the first publications in which it was used was Chris Atton (1993), who associated it with the collection on environmental issues, saving resources, recycling, purchasing green products and awareness about pollution in the workplace.

Use of Internet and Environmental Sustainability

The improvement in technology and its wide acceptance has influenced the use of online information resources greatly. Office staff should have access to trending technological gadgets such as smart phones, tablets, laptops and desktop computers connected to the internet, their use of internet have increased. The high rate use is facilitated by the competitive nature of internet providers which led to the reduction in the cost of data in Nigeria. Among other things, students use internet to search information materials online for academic, social, business and personal development. This calls for greater use of internet by lecturers since their students are already regarded as computer or internet dwellers, in order words, digital citizens (Yeroku, 2015).

Open access to e-journals and literature will enhance utilization of office information resources and enrich education. Besides, e-journals, online databases are vital in modern day research in the universities. Online databases are usually collections of e-journals and e-books provided by offices in order to ensure cost effective access to these e- resources to the end-users. The most effective way to provide access to electronic books/journals in schools is through subscription to online databases which can be accessed through the internet. Online databases are a collection of electronic information sources by publishers from various fields and disciplines (Brcuh, 2007). For staff to utilize the growing range of electronic resources they must acquire and practice the skills necessary to exploit them (Okello-Obura, 2010). CD-ROM databases allow users access to relevant databases without robust Internet connectivity in offices. Besides, CD-ROM databases are of immense value over print if the system is networked, as patrons at their terminals could access information without coming to the office. CD-ROM databases are important tools for identifying the bibliographic details of potentially useful documents and ensure easy access to large volumes of literature for utilization.

However, even if materials are made available without training the staff on how to access and use it, it will remain useless. This was in line with the assertion of Wozar and Worona

(2013) in their conclusion of a research conducted on the use of online information resources by nurses.

The discussions of online database usage begin with the assumption that an individual lecturer will naturally want to conduct his or her own search for improved teaching. Providing quick and easy access to online information resources is the primary concern as accessing online information resources could be jeopardized by lack of necessary search skills needed to access such materials. This could make some students conclude that the information they are looking for is not online.

As writing materials grew in number, need for offices to acquire, organize, process, preserve and systematically arrange information materials for easy retrieval of users increased also. Different offices use different classification schemes such as office of Congress, Dewey Decimal, Universal Decimal, Bliss, Colon to mention but a few. All these have their unique ways of arranging materials with alphabet and numerals. The most recent of the aforementioned is Machine Readable Code (MARC) used for cataloging of online materials. This contemporary way of relaying information requires training of users on how materials are organized in order to achieve the objective of the office which is to save users' time. Such training is called search skills. Search skill is the ability to recognize the way materials are organized and how to retrieve such materials without hindrances. Search or internet skill is necessary for users both in traditional office arrangement and the modern one which involves the use of technology.

Theoretical Review

Fundamental Behaviour Theories of Reasoned Action and Planned Behaviour

If one wished to find out the reasons employees have a tendency toward using green enabling facilities or performing the green process, it is essential to comprehend and have a better understanding of their behaviours and their trends. Theories such as the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 2021) and the Theory of Planned Behavior (TPB) (Ajzen, 2020) have been conducted for the purpose of understanding the reasons of this tendency. Various researches were carried through in various conditions, for example making use of cars that have low carbon emission (Lane & Potter, 2017), textile use and disposal (Morgan & Birtwistle, 2019), and trying to conserve the energy (Gupta & Ogden, 2009). However, seeing the past it becomes evident that the Theory of Planned Behaviour had also been practices in various researches and studies with green concept (Aertsens, et al., 2019; Arvola, et al., 2018; Tarkiainen & Sundqvist, 2015; Vermeir & Verbeke, 2006).

Therefore, in order to follow the trend and be in the same line of the previous studies and researches, TPB and TAM have been chosen and been set as the theoretical framework of this study. According to Ajzen's (2020) assessments, in TRA, the employees' behaviour is assessed through examining their intention behaviour, where the intentions are defined as the quantity of willpower anyone contributes to doing something and which includes motivations as well (as it has been expressed in Smith & Paladino, 2018). It can be stated that here, intention is the precedent of behaviour; thus, it is possible to employ it for

predicting behaviour. The TPB model has undergone more changes through including the “perceived behavioral control” to the TRA Model. This has been carried out to handle the situations employees” sometime face in which they are prevented from acting in accordance with green behaviours because of some restriction and lack of other options. In these situations, perceived behavioural control, which is the employee’s own view of his/her ability to behave in a certain way, is needed (Ajzen, 2022).

Methodology

The correlational research design for the study was correlational design as the independent variables of green office was compared with the dependent variable of environmental sustainability in tertiary institutions in Rivers State.

The population for the study was 250 which consisted of office staff working in tertiary institutions in Rivers State. The tertiary institutions include Capt. Elechi Amadi Polytechnic, Rumuola, Ken Saro Wiwa Polytechnic, Bori, Rivers State University, Ignatius Ajuru University of Education, Rivers State College of Health Technology. A total population comprised of 250 office staff drawn from the offices of Heads of departments, deans, bursar, rector/VCs offices, directors and other principal offices in tertiary institutions in Rivers State.

S/N	Schools	Number
1	Capt. Elechi Amadi Polytechnic, Rumuola	30
2	Ignatius Ajuru University of Education	60
3	Rivers State College of Health	23
4	Rivers State University	87
5	Ken Saro Wiwa Polytechnic, Bori	50
	Total	250

Source: Bursary unit of institutions.

The sample size of 200 representing 90% of the total population was used. The stratified sampling technique in which the 30 office staff were drawn from each of the tertiary institutions under investigation.

The instrument used for data collection was questionnaires. The questionnaire instrument was tagged, ‘Green Office and Sustainable Environment’ (GOSE).

The questionnaire was administered personally by the researcher, with the aid of research assistant. Out of the 200 copies of the questionnaire distributed, 200 or 95% were duly returned and completed upon which the study based its analysis.

Mean and standard deviation were used to answer the research questions at the mean benchmark of 2.5 while Pearson Product Correlation Coefficient was used to test the null hypotheses at .05 significance level.

Results

Research Question one: How does e-resourcing relate to environmental sustainability in state tertiary institutions in Rivers State?

Table 1: How e-resourcing relates to environmental sustainability in state tertiary institutions in Rivers State

Descriptive Statistics				
S/N items	N= 200	Mean	Std. Deviation	Remark
1. there are digital repository for information in my institution		1.3647	.48277	Disagreed
2. there are digital repository for institutional information and records		2.3941	1.32476	Disagreed
3. There are adequate computer systems for alternative office system		1.9000	1.13914	Disagreed
4. Management lays emphasis on environmental awareness of e-machines		2.1529	1.16157	Disagreed
5. Management has created special electronic paper shredding for staff		2.7882	.48879	Agreed
Grand Mean		2.12	.919	Disagreed

Table 1 above showed in item 1 mean score of 1.3647 and SD .48277 which implied that respondents disagreed that there is digital repository for information in my institution. In item 2 mean score of 2.3941 and SD 1.32476 equally showed that respondents disagreed that there is digital repository for institutional information and records. In item 3 mean score of 1.9000 and SD 1.13914 showed that respondents disagreed that There are adequate computer systems for alternative office system. In item 4 mean score of 2.1529 showed that respondents disagreed that Management lays emphasis on environmental awareness of e-books and in item 5 with mean score of 2.7882 and SD .48879 implied that respondents agreed that Management has created special electronic reading unit for staff. Thus, aggregate mean score of $2.12 < 2.5$ showed that respondents disagreed that e-resourcing relate to environmental sustainability in state tertiary institutions in Rivers State.

Research Question 2: How does natural environment relate to environmental sustainability in state tertiary institutions in Rivers State?

Table 2: How natural environment relate to environmental sustainability in state tertiary institutions in Rivers State

Descriptive Statistics				
S/N Items	N=	Mean	Std. Deviation	Remark
6. There are green planting around the office building	200	1.1824	.38728	Disagreed
7. The office building is secluded from other academic scenes		2.6000	1.24630	Agreed
8. There natural flowers in pots within the office reading halls		1.9529	1.15031	Disagreed
9. The major source of ventilation in the office come from surrounding trees		2.0471	1.21534	Disagreed
10. Incinerators are used around trees and not in the open environment		1.3882	.48879	Disagreed
Grand Mean		1.83	.891	Disagreed

Table 2 above showed in item 6 mean score of 1.1824 and SD .38728 which implied that respondents disagreed that there are green planting around the office building. In item 7 mean score of 2.6000 and SD 1.24630 showed that respondents agreed that office building is secluded from other academic scenes. In item 8 respondents disagreed that there are natural flowers in pots within the office reading halls with mean score of 1.9529 and SD 1.15031. In item 9 mean score of 2.0471 and SD 1.21534 showed that respondents disagreed that major source of ventilation in the office come from surrounding trees and in item 10 mean score of 1.3882 and SD .48879 showed that respondents disagreed that incinerators are used around trees and not in the open environment.

Thus, aggregate mean score of $1.83 < 2.5$ showed that respondents disagreed that respondents disagreed that natural environment relate to environmental sustainability in state tertiary institutions in Rivers State.

Research Question 3: How does ability to use the internet relate to environmental sustainability in state tertiary institutions in Rivers State?

Table 3: How the ability to use the internet relate to environmental sustainability in state tertiary institutions in Rivers State

Descriptive Statistics				
S/N Items	N=200	Mean	Std. Deviation	Remark
11. There is internet provision in the office		1.1824	.38728	Disagreed
12. I can search details in the internet		2.6000	1.24630	Agreed
13. Staff can use other adjoining applications to internet such Ms Word and Powerpoint		1.9529	1.15031	Disagreed
Grand Mean		1.245	.983	Disagreed

Table 3 above showed in item 11 mean score of 1.1824 and STD .38728 that respondents disagreed that there is internet provision in the office. In item 12 mean score of 2.60 and STD 1.24630 showed that respondents agreed that they can use search details in the internet. In item 13 mean score of 1.9529 and STD 1.15031 showed that respondents disagreed that staff can use other adjoining applications to internet such MS Word and Powerpoint.

Thus, aggregate mean score of 1.25 > 2.5 showed that respondents disagreed on their ability to use the internet relate to environmental sustainability in state tertiary institutions in Rivers State.

Hypothesis one: There is no significant relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State.

Table 4: PPMC test of relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State

Correlations							
Variables			Environmental sustainability				
E-resourcing		Correlation Coefficient	1.000	.025	-.187 [*]	.593 ^{**}	-.303 ^{**}
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	200	200	200	200	200
		Correlation Coefficient	.025	1.000	.609 ^{**}	.162 [*]	.645 ^{**}
		Sig. (2-tailed)	.000	.	.000	.001	.000
		N	200	200	200	200	200
		Correlation Coefficient	-.187 [*]	.609 ^{**}	1.000	-.204 ^{**}	.833 ^{**}
		Sig. (2-tailed)	.000	.000	.	.001	.000
		N	200	200	200	200	200
		Correlation Coefficient	.593 ^{**}	.162 [*]	-.204 ^{**}	1.000	-.206 ^{**}
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	200	200	200	200	200
		Correlation Coefficient	-.303 ^{**}	.645 ^{**}	.833 ^{**}	-.206 ^{**}	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	200	200	200	200	200
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 4 above showed coefficient value of .833, N-value of 200 and P-value of .001<.005 which implied that there is a significant relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State. The null hypothesis is therefore rejected.

Hypothesis two: There is no significant relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State.

Table 5: PPMC test of relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State

Correlations							
Variables			Environmental Sustainability				
Natural Environment		Correlation Coefficient	1.000	.551**	.080	.658**	-.001
		Sig. (2-tailed)	.	.000	.297	.000	.989
		N	200	200	200	200	200
		Correlation Coefficient	.551**	1.000	.521**	.189*	.610**
		Sig. (2-tailed)	.000	.	.000	.014	.000
		N	200	200	200	200	200
		Correlation Coefficient	.080	.521**	1.000	-.181*	.791**
		Sig. (2-tailed)	.297	.000	.	.018	.000
		N	200	200	200	200	200
		Correlation Coefficient	.658**	.189*	-.181*	1.000	-.108
		Sig. (2-tailed)	.000	.014	.018	.	.161
		N	200	200	200	200	200
		Correlation Coefficient	-.001	.610**	.791**	-.108	1.000
		Sig. (2-tailed)	.989	.000	.000	.161	.
		N	200	200	200	200	200
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Table 5 above showed coefficient value of .610, N-value of 200 and P-value of .000<.005 which implied that there is a significant relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State. The null hypothesis is therefore rejected.

Hypothesis Three: There is no significant relationship between ability to use the internet and environmental sustainability in state tertiary institutions in Rivers State.

Table 6: PPMC test of relationship between ability to use the internet and environmental sustainability in state tertiary institutions in Rivers State

Correlations							
Variables			Environmental sustainability				
Ability to Use the Internet		Correlation Coefficient	1.000	.025	-.187 [*]	.593 ^{**}	-.303 ^{**}
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	200	200	200	200	200
		Correlation Coefficient	.025	1.000	.609 ^{**}	.162 [*]	.645 ^{**}
		Sig. (2-tailed)	.000	.	.000	.001	.000
		N	200	200	200	200	200
		Correlation Coefficient	-.187 [*]	.609 ^{**}	1.000	-.204 ^{**}	.833 ^{**}
		Sig. (2-tailed)	.000	.000	.	.001	.000
		N	200	200	200	200	200
		Correlation Coefficient	.593 ^{**}	.162 [*]	-.204 ^{**}	1.000	-.206 ^{**}
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	200	200	200	200	200
		Correlation Coefficient	-.303 ^{**}	.645 ^{**}	.833 ^{**}	-.206 ^{**}	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	200	200	200	200	200
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 6 above showed coefficient value of .823, N-value of 200 and P-value of .001<.005 which implied that there is a significant relationship between ability to use the internet and environmental sustainability in state tertiary institutions in Rivers State. The null hypothesis is therefore rejected.

Summary of Findings

The findings of the study are hereunder itemized:

1. Respondents disagreed that e-resourcing relate to environmental sustainability in state tertiary institutions in Rivers State.
2. Respondents disagreed that natural environment relate to environmental sustainability in state tertiary institutions in Rivers State.
4. There is a significant relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State.

5. There is a significant relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State.
6. There is significant relationship between ability to use the internet and environmental sustainability in state tertiary institutions in Rivers State

Discussion of Findings

The findings of the study are hereunder discussed:

E-Resourcing and Environmental Sustainability

Tested hypothesis one showed that there is a significant relationship between e-resourcing and environmental sustainability in state tertiary institutions in Rivers State. To buttress the position of the respondents, Fourie, (2012), stated that e-resourcing is associated with processes, phenomena and activities that, as a consequence, minimize the negative impact of offices, users and office staffs on the electronic environment. For example, a green office has been linked to informational behaviour and the green society (Fourie, 2012), green buildings (Chakraborty, 2013; Tseng, 2008), placemaking (Oyelude, 2018), office collection and e-learning (Connel, 2010; Marcum, 2009), green publishing (Metz and Seadle, 2012) and recycling (Rickert, 2001). Various aspects of environmental sustainability of information systems and services were analysed by Gobinda Chowdhury (2012, 2013, 2014). In the context of the tasks carried out by offices, and the goals of green offices, the concept of a 'green information service' (IS) is important. Chowdhury (2012) points out that green IS 'should be designed to minimize greenhouse gas emissions throughout its lifecycle from content creation to distribution, access, use, and disposal.

Natural Environment and Environmental Sustainability

Tested hypothesis two showed that there is a significant relationship between natural environment and environmental sustainability in state tertiary institutions in Rivers State. The stance of respondents aligns with the suggestion of Harri Sahavirta (2013) natural environment for office buildings often boils down to a green building, as suggested by Harri Sahavirta (2013). Associating a green office primarily with a green building and its convenient location results from the definition functioning in literature published in Online Dictionary of office and Information Science, nota bene, the only office science reference book known to the author which took this term into account. There, a green office is treated as a synonym for the concept of a sustainable office and defined as a office designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of resources (water, energy, paper), and responsible waste disposal (recycling, etc.).

Ability to Use the Internet and Environmental Sustainability

The findings of the study revealed that relationship between ability to use the internet and environmental sustainability in state tertiary institutions in Rivers State. Yeroku, (2015) aligned with the present study, stating that the improvement in technology and its wide acceptance has influenced the use of online information resources greatly. Office staff should have access to trending technological gadgets such as smart phones, tablets, laptops and desktop computers connected to the internet, their use of internet have increased. The high rate use is facilitated by the competitive nature of internet providers which led to the reduction in the cost of data in Nigeria. Among other things, students use internet to search information materials online for academic, social, business and personal development. This calls for greater use of internet by managers since some of their younger staff are already regarded as computer or internet dwellers, in order words, digital citizens (Nweke, 2018).

Conclusion

The intention of the study was to investigate green office and environmental sustainability in tertiary institutions in Rivers State. The study has established that that there are no adequate preparations or methods in tertiary institutions in Rivers State's offices to for green office or environmental friendliness. The reached that relationship between e-resourcing, ability to search the internet and environmental sustainability in tertiary institutions in Rivers State. It also established that natural environment significantly relates to environmental sustainability in state tertiary institutions in Rivers State.

Recommendations

Based on the findings of the study, the following recommendations have been made:

1. Management of tertiary institutions in Rivers State should commence tree planting near office buildings in their various campuses.
2. Management should equally equip offices with modern office digital facilities and enabling training for effective e-resourcing in the offices.
3. Management should deploy and train staff on the use of internet facilities.

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