PERSONNEL ATTITUDE AND GREEN PRACTICES IN UNIVERSITY LIBRARIES IN SOUTH-WEST, NIGERIA

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Abstract

Many organisations including university libraries especially in developing countries like Nigeria are faced with the need to prioritise safe environmental conditions in their operations as a result of emerging global environmental concerns. University libraries and their personnel are being encouraged to adopt green practices for managerial, structural design and information service activities in promoting environmental sustainability and ecological balance. Literature and personal observation revealed that many university libraries in Nigeria have not consciously embraced green practices due to negative attitude of personnel. This study investigates library personnel attitude and green culture practices in universities in South-west, Nigeria. The survey design of the correlational type was adopted. All 202 university library personnel in six federal university libraries in Southwestern Nigeria were enumerated. Questionnaire was the main data collection instrument. Data were analysed using descriptive statistics, Pearson Product Moment Correlation and multiple regression at 0.05 level of significance. The most prominent green culture practices undertaken by university libraries include: promotion of teleconferencing to conduct business meetings and conferences ($\bar{x} = 3.40$) and the use of energy-saving facilities for library operations ($\bar{x} = 3.35$). The most frequent green culture practice undertaken in the university libraries include the promotion of teleconferencing ($\bar{x} = 3.40$: std $= 0.71$). Specifically, university library personnel exhibited slightly high/positive attitude to green practices in university libraries in Southwestern Nigeria. There is a statistically significant relationship between library personnel attitude and green practices in university libraries in Southwestern Nigeria. Library personnel attitude influence green practices in university libraries in Southwestern, Nigeria. The university library management should organise awareness to raise awareness to change the attitude of their staff towards green practices in the library.

Keywords: Library personnel attitude, green practices, university library personnel, South-west, Nigeria

Introduction

University libraries all over the world are established to provide support to the teaching, learning, research and community service functions of members of their parent institutions. In performing their numerous functions, university libraries acquire information resources in diverse formats, organise, preserve and disseminate them to users through a plethora of user-oriented services (Babarinde & Onifade, 2019). The main goal of every university library is to provide satisfactory services to its users, by making more information resources available to them. The extent to which university libraries can provide services in meeting the information needs of their users depends on a number of factors that include funding, staffing, quantity, depth and recency of their collections, it also includes general support and goodwill of the management of the parent body. However, attention into the environmental factors as well as conducting information services with consciousness of green practices that could promote environmental preservation and ecological balance is also paramount.

Green practices refer to all related projects with a specific aim of helping businesses reduce environmental impacts of their business operations as well as helping them to save money (Chukwuka & Nwomiko, 2018). Green practices bother on actions taken with the consideration of environmental safety; these can include actions with less negative environmental impact. Green practices go far beyond environmental protection, but even to waste management, energy conservation and recycling. It must be emphasized that green practices are integrated with corporate ethics and create corporate value, as such, university library managers must infuse green practices in their policies. This will directly help to influence organisational decisions to engage in green practices. Adopting a green strategy requires companies to implement strict environmental standards for their green products or processes (Chang, 2018). Literature evidence reveals that employee engagement in green practices plays a central role as employees can contribute to reducing energy and other resource consumption by adopting everyday green behaviors in the workplace (Morgan & Rayner, 2019; Bulinska-Stangrecka & Bagienska, 2021).

Typically, green practices in the context of university library can include practices such as, installing energy efficient technology, ensuring eco-efficient landscaping, formulating green policies, engaging in green partnerships and using natural resources. These practices also include using energy efficient led bulbs, installation of solar, ensuring proper waste management, using digital documents instead of paper and delivering green services. Others are giving green education, instituting recycling programmes, using natural lighting, natural ventilation, minimising paper wastage, turning off unused lights, recycling rain water, raising green awareness and ensuring environmental conscious design. Undertaking green practices in university libraries is a concern of both management of library and library staff, as such, conscious efforts must be made to reduce environmental damage which could be harmful to human survival in the long-run (Collins, 2021). However, If the 12-point IFLA checklist of green library will be ensured in university libraries, both management (at library and university level) and library staff have roles to play. As such, the focus of this study is limited to green practices within the university library and by university staff.

By adopting green culture practices, libraries not only contribute to environmental preservation but also reinforce the significance of sustainability within the global context (Ren & Lu, 2024). As libraries continue to evolve in response to the growing importance of sustainability, many institutions worldwide have embraced a range of green practices to reduce their environmental footprint and promote eco-friendly behaviors. These practices are varied, reflecting the diverse activities undertaken in different organisations. Particularly in libraries, energy efficiency has become one of the most prominent green practices. Many libraries have upgraded their lighting systems to energy-efficient LED bulbs, which consume less electricity and have a longer lifespan. Similarly, libraries are modernizing their ventilation and air conditioning systems to optimize energy usage and reduce waste.

A growing number of libraries are also taking the initiatives of installing solar panels, tapping into renewable energy sources to further reduce their dependence on non-renewable power. This shift towards sustainable energy options not only lowers operational costs in libraries but will also help to demonstrate library's commitment to reducing its carbon footprint (Adeyemi, Olasupo, Johnson, Adegun & Sajuyigbe, 2024).

In addition to energy efficiency, waste management is another critical area where libraries have made significant strides. Many institutions are now implementing robust recycling programmes, ensuring that paper, plastics, and other recyclables are properly sorted and processed. Libraries are also minimizing paper usage by offering digital resources, such as e-books, online journals, and digital archives, which help reduce the amount of paper consumed in daily operations. The promotion of digital documents, alongside initiatives to discourage unnecessary printing, further aligns libraries with sustainable practices. By making these shifts, libraries are not only reducing waste but also encouraging their patrons to adopt similar eco-friendly practices (Yasir, Majid, Yasir & Qudratullah, 2020).

Sustainable building design is another area where libraries are making impactful changes, the design process also focuses on maximizing energy efficiency through features such as natural lighting, insulation, and ventilation systems that reduce the need for artificial heating and cooling. These environmentally-conscious design choices enhance the library's ability to serve its purpose while minimizing its environmental impact over time (Mwanzu, Bosire-Ogechi & Odero, 2023). As university libraries continue to adopt green culture practices to reduce their environmental impact and contribute to broader sustainability goals, the role of library personnel in these efforts cannot be overlooked. A possible factor that can influence the successful integration of green initiatives within university libraries is the attitude of the staff.

Attitudes shape behavior, understanding how library personnel perceive and engage with sustainability is essential for fostering a positive environment for green culture practices. According to Kang and Jung (2023), attitude is generally defined as a psychological construct that reflects an individual's evaluation of an object, person, or situation, encompassing his/her degree of like or dislike. This complex mental state involves beliefs, feelings, values, and tendencies to act in particular ways. In the context of university library staff, attitude plays a critical role in determining whether staff members are motivated to adopt and support green practices. Research (Mchunu and Mokwena, 2020) has shown that attitudes toward environmental sustainability in libraries can significantly influence the extent to which green initiatives are embraced by library personnel.

When library personnel hold positive attitudes toward green culture practices, they tend to engage proactively with sustainable measures. Ren and Lu (2024) stated further that these individuals are more likely to take the initiative in adopting energy-saving practices, such as installing energy-efficient lighting or optimizing heating and cooling systems when they possess a positive attitude to them. They may also advocate for reducing waste through recycling programmes and encouraging the use of digital resources over paper, contributing to a reduction in the library's overall ecological footprint. Moreover, librarians with positive attitudes often champion environmental education and organize activities that raise awareness about sustainability among library users. Their enthusiasm for sustainability is often reflected in their willingness to participate in and support initiatives aimed at reducing the library's environmental impact.

Conversely, Kang and Moreno (2020) emphasises that negative attitudes towards sustainability can significantly impede the successful implementation of green culture practices in libraries. Librarians with negative attitudes may be reluctant to adopt green measures, often due to a lack of awareness or perceived obstacles, such as high costs or resource limitations. For instance, concerns about the financial implications of implementing energy-efficient technologies or initiating waste

reduction programs may prevent library staff from supporting such initiatives. Additionally, negative attitudes may stem from a lack of understanding of the long-term benefits of sustainability, such as cost savings or enhanced institutional reputation. These attitudes can hinder the overall progress of green culture practices in university libraries

According to Yafi, Tehseen and Haider (2018), the attitudes of library personnel are shaped not only by individual beliefs and experiences but also by the broader organisational culture within the library. Libraries that prioritise sustainability and actively promote green culture practices are more likely to cultivate a positive attitude among staff. In contrast, libraries that do not emphasise sustainability as a core value may struggle to engage their personnel in green initiatives, leading to less participation and support for environmentally friendly practices.

Statement of the problem

The global threat to the environment exhibited by the depletion of the Ozone layer has made it necessary for all organisations including libraries to decide on going green. Green libraries have emerged as vital institutions in promoting environmental sustainability within academic environments. These libraries are to carry out their services in a way as to minimize negative impact on the environment, and also foster eco-friendly behaviors among library staff and users. Green libraries thus carry out green practices such as energy conservation, waste reduction, recycling, use of eco-friendly technologies and digital resources to reduce paper consumption. These practices have the potential to not only reduce the ecological footprint of library operations, but also could help to instill a culture of environmental responsibility in the university library and the entire university community. It has however, been observed that many university libraries in Southwest Nigeria, particularly in Oyo State, do not adequately undertake green practices. A major factor that could be responsible for this situation is the negative attitude of library personnel towards green culture practices. When library personnel do not exhibit favourable attitude towards environmental sustainability initiatives, they would be reluctant to participate in practices that promote such initiatives. Thus, the attitudes of library personnel could hinder their participation in eco-friendly practices and significantly impact the effectiveness of green practices in the university libraries. It is within this context that this study investigates personnel attitudes and green practices in university libraries in Oyo State.

Research questions

The following research questions were answered in the study
1. What are some green practices undertaken in university libraries in Oyo State, Nigeria?
2. What is the attitude of personnel towards green practices in university libraries in Oyo State, Nigeria?

Hypothesis

1. There is no significant relationship between personnel attitudes and green practices in university libraries in Oyo State, Nigeria.

Literature review

Libraries worldwide are increasingly adopting green practices to minimise their environmental impact and align with global sustainability goals. These practices, often referred to as "green librarianship," represent a proactive approach to integrating environmental consciousness into library operations, policies, and services. The concept of a "green library" includes efforts to reduce energy consumption, manage resources efficiently, minimize waste, and engage in environmentally friendly practices. Libraries aim not only to serve as repositories of knowledge but also to lead as models of

sustainability within their communities (Mańkowska, Tłoczyński, Wach-Kloskowska & Bulczak, 2023). Singh and Mishra (2019) found that green librarianship extends beyond operational efficiency to encompass advocacy and education, raising awareness among library users about the importance of sustainability. This dual role positions libraries as both practitioners and educators in the movement toward a more sustainable future. Key areas of focus include sustainable building designs, eco-friendly resource management, and community engagement in green initiatives.

In China, Kang and Jung (2023) investigated libraries that have displayed varied levels of commitment to sustainability. While economic and social development has traditionally taken precedence, environmental concerns are gradually gaining attention. Library directors have expressed an interest in adopting greener practices, but implementation remains inconsistent. Efforts to reduce the environmental impact of libraries are in their nascent stages, with potential for significant progress through strategic policy changes and increased awareness. In Nigeria, Adeyemi, et al., (2024) examined that academic libraries, such as those in Kwara State, have implemented practices aimed at resource preservation and economic sustainability. Measures like routine fumigation and resource-sharing have been adopted. However, the increasing adoption of ICT tools has resulted in a high carbon footprint, underscoring the need for eco-friendly alternatives. Libraries in Nigeria could benefit from investments in renewable energy, such as solar power, to mitigate their environmental impact while sustaining technological advancements.

Demirtas and Gurpinar (2023) indicated that university libraries in Turkey have made strides toward green practices, gaining recognition for environmentally friendly measures such as energy-efficient infrastructure and waste reduction initiatives. Library users in these institutions have expressed varying levels of environmental awareness. Despite these advancements, studies such as (Chikmah and Lestari, 2022 & Abegunde, Awujoola and Bamidele, 2023) showed no significant difference in daily environmental attitudes between users of green libraries and non-green libraries, highlighting the need for stronger educational efforts to align user behaviors with institutional sustainability goals. Philippine libraries have been recognized for their progress in green initiatives, with many libraries achieving favorable ratings in sustainability assessments (Fresnido & Esposo-Betan, 2017). These efforts reflect a growing awareness of the importance of environmental stewardship. Despite this progress, there is room for further improvement in areas such as renewable energy adoption, waste management, and user engagement in sustainable practices.

Maina (2024) stated that Kenyan university libraries are actively participating in the Green Library Initiative, focusing on energy-efficient designs and resource conservation. These libraries are overcoming challenges such as limited resources by demonstrating commitment to environmental stewardship. Initiatives like using energy-efficient lighting and promoting the reuse of materials are key features of their green practices. In Pakistan, Khalid and Batool (2020) is of the opinion that the state of green practices in university libraries is relatively underdeveloped. Many librarians lack awareness of green librarianship, and there are no structured guidelines to promote sustainable practices. Addressing these gaps requires targeted educational programs, policy development, and investment in environmentally friendly infrastructure. To achieve sustainability, libraries worldwide are implementing various strategies. Libraries are adopting sustainable printing practices by encouraging double-sided printing, using recycled paper, and employing energy-efficient printers. These practices help reduce paper, ink, and electricity consumption, thereby minimizing waste and operational costs (Johnson, Tilt, Ries & Shindle, 2019). The adoption of energy-efficient infrastructure, such as Low Energy Dispensing (LED) lighting, motion-sensor systems, and Heating, Ventilation and Air Conditioning HVAC systems optimized for energy conservation, is a common strategy. Libraries are also exploring renewable energy sources like solar power to reduce their reliance on fossil fuels (Parida & Brown, 2021).

Attitude has been defined by various scholars in psychology and related fields. The American Psychological Association (APA) (2014) defines attitude as a relatively enduring and general evaluation of an object, person, group, issue, or concept on a dimension ranging from negative to positive. This definition emphasizes the evaluative nature of attitudes and their role in summarizing beliefs, emotions, and past behaviors associated with specific objects. Johnson, Martinez-Berman and Curley (2022) describe attitude as a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. This highlights the evaluative aspect of attitudes, suggesting that they reflect an individual's predisposition to respond positively or negatively toward a specific entity. Attitude is a psychological construct that represents an individual's degree of like or dislike for an item. It is a complex mental state involving beliefs, feelings, values, and dispositions to act in certain ways. Attitudes can significantly influence behavior and decision-making processes, including those related to environmental practices and sustainability (Soroya, Mahmood, Shahid, Soroya, Hussain & Ilyas, 2022).

The attitude of personnel in libraries is a critical determinant of the success and sustainability of preservation practices. Studies have consistently highlighted the direct relationship between the disposition of library staff and the efficacy of preservation activities. In Niger State, Nigeria, for instance, Bankole, Popoola, Olanloye and Ayebameru (2023) observed that personnel with positive attitudes were more proactive in adhering to preservation protocols and adopting innovative methods to extend the lifespan of library resources. These individuals often displayed higher levels of motivation to participate in capacity-building programs, which further enhanced their expertise in handling delicate archival materials and implementing modern preservation techniques. On the other hand, Adeyemi (2020) stated that negative attitudes among library personnel have been shown to impede preservation efforts significantly. Factors contributing to such attitudes include a lack of proper training, limited awareness of the importance of preservation, and the perception that preservation is an additional burden rather than an integral part of their responsibilities. These challenges are often exacerbated by insufficient support from library management, including inadequate resources and limited opportunities for professional development. Furthermore, creating an environment that values and recognizes the contributions of personnel to preservation efforts can motivate staff to engage more actively in sustainable practices.

For example, implementing reward systems for exemplary performance in preservation initiatives can serve as an incentive for positive behavioral changes (Okafor, 2019). Similarly, the attitudes of library personnel are intrinsically connected to their overall job performance, influencing their ability to meet organizational goals effectively. According to Adebayo and Ogunleye (2020), a positive attitude among library staff can significantly enhance their capacity to prioritise tasks, manage time effectively, and meet deadlines. This correlation stems from the intrinsic motivation which positive attitudes fosters, thus, enabling personnel to approach their duties with enthusiasm and commitment.

The use of green culture practices in libraries has received increased attention over the past few years. A number of studies have investigated the perceptions of library staff toward sustainability and sustainable practices, showing a mixture of positive attitudes combined with barriers to implementation. Ren and Lu (2022) surveyed a total of three U.S. states to explore librarians' attitudes toward environmental sustainability and how libraries might contribute to the acceptance of green behaviors. Their findings revealed that while library personnel recognize the importance of sustainability, the implementation of green initiatives is often constrained by limited resources, inadequate institutional support, and insufficient awareness. The paper highlighted the importance of policy frameworks and training strategies to improve librarians' skills to better sustain their work. Likewise, Demirtas and Gurpinar (2023) investigated the green practices of the university libraries in

Turkey, with regard to the awareness and attitudes of the users regarding the environment. According to the research, a vast number of libraries had already implemented eco-friendly practices including energy-saving lighting, waste handling and digitaisation of resources.

Furthermore, it was observed that users who had received environmental education demonstrated significantly higher awareness and willingness to engage in green practices. This indicates that library staff and also library users both have an essential role to play in promoting environmental sustainability among academic institutions. In the Nigerian context, Olayemi et al. (2019) surveyed green library practices at select academic libraries from the Kwara State area. Their research indicated that while librarians acknowledge the significance of sustainability in library operations, several barriers hinder the effective implementation of green culture practices. Amongst these are underfunding, lack of training for eco-friendly actions, and insufficiency of infrastructural backing. The study recommended the provision of financial support, institutional policies, and awareness campaigns to promote sustainable practices in Nigerian libraries. These empirical researches indicate that, although on the whole there is a general positive attitude towards using green culture practices within the library, financial limitations, training shortage, as a consequence, and weak institutional support still bar the way for successful practice. Alleviating these barriers through policy measures, professional development, and infrastructural assistance will be crucial to the creation of a viable library environment.

Kang (2020) observed that in China, library directors tend to exhibit low levels of awareness and commitment to sustainability issues. While their primary focus remains on economic and social development, environmental concerns often receive minimal attention. Kang is of the opinion that this lack of focus underscores the pressing need for increased environmental consciousness among library leadership to mitigate the ecological impact of library activities. Similarly, Khalid et al. (2020) found that university libraries in Pakistan face challenges in adopting green practices due to a general lack of familiarity with sustainability concepts among librarians. They argued that the absence of structured guidelines further exacerbates the uneven implementation of green initiatives, indicating the necessity for standardization and targeted training programs. In contrast, the United States presents a more encouraging scenario. Ren et al. (2024) stated that the Green Library Movement, supported by influential organizations like the International Federation of Library Associations and Institutions (IFLA) and the American Library Association (ALA), has significantly advanced the commitment of librarians to environmental sustainability. However, Ren et al. also found that despite this commitment, a disconnection persists between the perceived importance of sustainability and the actual practices implemented in libraries. This gap highlights the need for greater alignment between the ideals of sustainability and their practical execution within library operations.

Methodology

The study adopted the descriptive survey. The population comprised all 202 library personnel (library staff with at least a diploma in Library and Information Studies even up to those who possessed a PhD) in six federal university (Federal University of Agriculture, Abeokuta, Ogun State, Federal University of Technology, Akure, Ondo State, Federal University, Oye-Ekiti, Ekiti State, Obafemi Awolowo University, Ile-Ife, Osun State, University of Ibadan, Ibadan, Oyo State and University of Lagos, Akoka, Lagos State) libraries in Southwestern Nigeria. The total enumeration method was adopted to sample the entire population of library personnel in the six federal universities. Questionnaire was the main data collection instrument. Data collected were analysed using the descriptive and inferential statistics, means and standard deviation as well as correlation analysis. The Statistical Product and Service Solution (SPSS) version 28 software was used.

Results and discussion

Question one: What are the green practices undertaken by library personnel in universities in South-west, Nigeria?

The green practices undertaken by library personnel in universities in South-west, Nigeria, were examined under 20 items, with the response scale of: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). This result is presented in Table 1.

Table 1: Green Cultures Practices undertaken by Library Personnel in Universities in South-west, Nigeria

S/N	Green Practices	SA	A	D	SD	Mean	SD
1	Use of recycled material in production process in business organisations	41 26.1%	86 54%	25 15.9%	5 3.2%	3.04	.741
2	Total reduction in paper use (sending of mails, digital meeting agenda)	40 25.5%	92 58.5%	15 9.6%	10 6.4%	3.03	.780
3	Use of biodegradable products as much as possible in business organization	40 25.5%	92 58.6%	15 9.6%	10 6.4%	3.05	.868
4	Recycling of used paper to make new paper.	32 20.4%	100 63.7%	20 12.7%	5 3.2%	3.01	.679
5	Use of green packets in the packaging of business products	56 35.7%	70 44.6%	31 19.7%	0	3.16	.730
6	Use of reusable products like bottles, crates, gallons among others in business organisations	32 20.4%	80 51.0%	40 25.5%	5 3.2%	2.89	.759
7	Discouraging the use of plastic bottles that are not reusable for products packaging	33 21.0%	82 52.2%	37 23.6%	5 3.2%	2.91	.754
8	Encouraging the use of green plastic that is usually made from plants- a renewable resources	37 23.6%	78 49.7%	32 20.4%	5 3.2%	2.97	.767
9	Discouraging the use of hazardous chemicals in the preservation of the library and its' resources	61 38.9%	63 40.1%	33 21.0%	0	3.18	.755
10	Using of solar to generators	64 40.8%	65 41.4%	28 17.8%	0	3.23	.733
11	Encouraging the proper waste management habits in every organisation.	47 29.9%	97 61.8%	13 8.3%	0	3.22	.581
12	Encouraging the use of energy saving equipment in library business operations	58 36.9%	94 59.9%	0	5 3.2%	3.35	.637
13	Encouraging the use of the right bulbs in business organization	64 40.8%	84 53.5%	9 5.7%	0	3.31	.587
14	Encouraging the repair of tools, equipment, rather than replacement	46 29.3%	101 64.3%	10 6.4%	0	3.23	.553
15	Encouraging of staff to make use of soft information than hard printed information	64 40.8%	88 56.1%	0	5 3.2%	3.34	.648
16	Encouraging the use of clean energy like solar, biogas as the main source of energy in business	47 29.9%	87 55.4%	23 14.6%	0	3.15	.652

17	Discouraging the use of carbon emitting sources of energy in business operation /organization	65 41.4%	78 49.7%	14 8.9%	0	3.32	.633
18	Encouraging staff to switch off all appliances, equipment at the end of every working day	43 27.4%	114 72.6%	0	0	3.27	.447
19	Teleconferencing are used to conduct business meetings and conferences wherever possible to reduce business travel	78 49.7%	69 43.9%	5 3.2%	5 3.2%	3.40	.706
20	Encouraging virtual interviews to reduce the use of papers	49 31.2%	108 68.8%	0	0	3.31	.465

The result from Table 1 highlights the green culture practices undertaken by library personnel in universities in South-west, Nigeria. The most prominent green culture practices undertaken by the libraries include: promotion of teleconferencing to conduct business meetings and conferences ($\bar{x}$ = 3.40), the use of energy-saving facilities for library operations ($\bar{x}$ = 3.35); and encouraging the use of soft information rather than printed materials ($\bar{x}$ = 3.34). In contrast, the least adopted green culture practices among the libraries are: discouragement of the use of plastic bottles that are not reusable for products packaging ($\bar{x}$ = 2.91) and use of reusable products like bottles, crates, gallons among others ($\bar{x}$ = 2.89).

Research question three: What is the attitude to green practices among library personnel in universities in South-west, Nigeria?

The attitude to green practices among library personnel in universities in South-west, Nigeria, was examined under 15 items, with the response scale of: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). This result is presented in Table 4.5.

Table 4.5: Attitude to Green Practices among Library Personnel in Universities in South-west, Nigeria

S/N	Library personnel attitude	SA	A	D	SD	Mean	SD
	Positive attitude						
1	Going green is the best to ensure environmental sustainability and to reduce library's expenditure	79 50.3%	68 43.3%	10 6.4%	0	3.44	.613
2	I actively support and advocate for green culture practices in the library	47 29.9%	105 66.9%	5 3.2%	0	3.27	.511
3	I consciously reduce paper usage by encouraging digital alternatives	60 38.2%	70 44.6%	27 17.2%	0	3.21	.716
4	I ensure that electronic devices and lights are turned off when not in use	33 21.0%	124 79.0%	0	0	3.21	.409

5	Implementing energy-efficient solutions, such as LED lighting and solar power, improves sustainability	64 40.8%	70 44.6%	23 14.6%	0	3.26	.699
6	I engage in waste management efforts, including proper recycling and disposal of materials	37 23.6%	93 59.2%	27 17.25%	0	3.06	.637
7	I support the use of natural lighting and ventilation to conserve energy	64 40.8%	93 59.2%	0	0	3.41	.493
8	I consciously educate other colleagues on the importance of environmental sustainability.	56 35.7%	97 61.8%	4 2.5%	0	3.33	.524
	Negative attitude						
9	Green culture practices are not necessary for library operations	86 54.8%	71 45.2%	0	0	3.55	.499
10	Green culture practices in the library are time-consuming and inconvenient	41 26.1%	106 67.5%	10 6.4%	0	3.20	.536
11	Reducing paper usage is not essential, as print materials are still widely used	48 30.6%	104 66.2%	5 3.2%	0	3.27	.514
12	Turning off unused lights and electrical devices does not significantly impact energy conservation	45 28.75	112 71.3%	0	0	3.29	.454
13	Waste sorting and recycling efforts are not a priority in the library	77 49%	75 47.8%	5 3.2%	0	3.46	.560
14	Implementing energy-efficient technologies in the library is not a major concern	40 25.5%	108 68.8%	9 5.7%	0	3.20	.524
15	I believe that the library does not need to emphasise the issue on green as it is a natural practice	58 36.9%	99 63.1%	0	0	3.37	.484

Table 2 reveals the attitudes of library personnel to green practices. The library personnel attitude towards green practices in universities in South-west, Nigeria, is presented in Table 4.5. The result showed a high level of green knowledge among the library personnel. This is evident from the result's weighted mean score of 3.30, which is significantly higher than the criterion mean score of 2.50. Specifically, the respondents are On positive attitude, finding showed that: most of the library personnel believe that going green is the best to ensure environmental sustainability and to reduce library's expenditure (x=3.44; std dev.=.613), support the use of natural lighting and ventilation to conserve energy (x=3.41; std dev.=.493), consciously educate other colleagues on the importance of environmental sustainability x=3.33; std dev.=.524) and actively support and advocate for green culture practices in the library (x=3.27; std dev.=.511). On negative attitude, library personnel believe that green culture practices are not necessary for library operations (x=3.55; std dev.=.499), waste sorting and recycling efforts are not a priority in the library (x=3.46; std dev.=.560), also they believe that believe that the library does not need to emphasise the issue on green as it is a natural practice (x=3.37; std dev.=.484) and that Turning off unused lights and electrical devices does not significantly impact energy conservation (x=3.29; std dev.=.454).

Hypothesis one: There is no significant relationship between library personnel attitude and green practices in universities in South-west, Nigeria.

The relationship between library personnel attitude and green practices in universities in South-west, Nigeria, was tested using Pearson's Product Moment Correlation (PPMC). The result is presented in Table 3 below:

Table 3: Relationship between library personnel attitude and green practices in universities in South-west, Nigeria

Variables	N	Mean	Std.Dev	R	P	Remark
Green knowledge	157	3.30	.300	.517	.000	Sig.
Green culture practice	157	3.17	.338			

The relationship between library personnel attitude and green practices by library personnel in universities in South-west, Nigeria, is presented in Table 3. The result revealed that there is a statistically significant relationship between library personnel attitude and green practices in universities in south-west, Nigeria (r = 0.517, P < 0.05).

Conclusion

The study concludes that the adoption of green culture practices in libraries is crucial for the entire sustenance of the university library environment, however, this requires a positive attitude among university library personnel. Green culture practices in libraries encompass sustainable initiatives such as energy conservation through natural lighting and solar power, waste reduction via recycling programmes, and the adoption of digital resources to minimise paper consumption. The integration of eco-friendly furniture, energy-efficient technologies, and green policies not only mitigates the environmental impact of university libraries but also fosters a conducive learning environment. Beyond operational benefits, these practices enhance cost efficiency, promote user well-being, and position libraries as centres for sustainability education, encouraging environmentally responsible behaviours within the academic community. The study therefore concludes that a library personnel attitude can influence green practices in university libraries.

Recommendations

Based on the conclusion reached in this study, the following recommendations are made;

1. University libraries should enhance green culture practices by expanding energy-efficient solutions such as solar power, LED lighting, and digital resources while promoting cross-ventilation as an alternative to air-conditioning.

2. University library personnel should be provided with regular training and awareness programmes on green culture practices to strengthen their knowledge and commitment to sustainability in university libraries in Oyo State, Nigeria.

3. The major challenges to green culture practices in libraries, including limited access to environmentally friendly resources, insufficient training, high costs of green technologies, absence of clear implementation policies, and inadequate funding, should be addressed through increased financial support, policy development, and institutional commitment.

4. Given the positive significant relationship between librarians' attitudes and green culture practices in university libraries in Oyo State, Nigeria, library management should actively

engage personnel in sustainability decision-making processes and encourage their participation in implementing eco-friendly initiatives.

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