

Strengthening the Role of Academic Libraries in Advancing Sustainable Development Goals (SDGs) in Nigeria

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Abstract

Academic libraries are at the centre of the academic excellent of higher institutions providing relevant information services and resources required for teaching, learning and research functions. This paper discusses the critical role of academic libraries in supporting the United Nations sustainable development goals (SDGs) in Nigerian. The results demonstrate that academic libraries are key drivers of sustainable development due to their ability to provide fair access to information that facilitates education, reduction of poverty, health, and gender equality. The research notes that academic librarians have a positive overall awareness and knowledge regarding the SDGs, especially the ability to align academic library services with the goals such as quality education (SDG 4), poverty eradication (SDG 1), good health and well-being (SDG 3), and gender equality (SDG 5). Nevertheless, the results also indicate a low profile of the contribution of academic libraries in certain aspects like collaboration, social media lobbying, and direct interactions with social issues. The key challenges that have been identified are lack of funding, inadequate ICT infrastructure, institutional policies connecting libraries to the SDGs, weak university engagements, and low collaborations with national and international stakeholders. The study suggests that more funding by the government and institutions, policy changes and building capacity will help to improve the strategic functions of academic libraries that will enable the academic libraries in Nigeria to be better players in facilitating inclusive and sustainable development.

Keywords: Academic libraries, Sustainable Development Goals, Nigeria, information access, library services, sustainable development.

1. Introduction

Academic libraries are regarded as intellectual hubs of higher academic institutions, which promotes teaching, research, and community. In the 21st century, where education is considered as a booster to sustainable development, the academic libraries have become a necessity in enhancing knowledge, facilitating digital literacy as well as equitable access of information. Academic libraries can achieve sustainable education systems by integrating their services with the Sustainable Development Goals (SDGs) that eventually lead to growth and development in any country. The Sustainable Development Goals (SDGs) are 17 international goals which the United Nations embraced in 2015 as the 2030 Agenda on Sustainable Development. They aim to address pressing global challenges such as poverty,

inequality, health, education, climate change, environmental degradation, peace, and justice. The SDGs are interlinked and universal, applying to all nations, developed and developing alike. The core principle is “leave no one behind.”

According to Itsekor, Asaolu and Osinulu (2015), libraries have been agents of change; they connect with people, strengthen communities and build assets of the nation. The different types of libraries are committed to meeting the information needs of people for societal and common good of the nation. Librarians, by collecting, organizing, storing and providing access to information, serve as change agents, helping organizations and individuals access and use information in order to develop more successful societies. Academic libraries in particular can create access to required information for the user community and ensure equitable access to books, journals, digital resources, and open educational resources (OERs). This access supports teaching, learning, and research, which are fundamental to building a sustainable education system and, by extension, national development. According to Lahyani, Diab and Moukhliiss (2024), academic libraries play a significant key role in contributing towards the improvement of national development through the provision of equitable quality education through a number of activities initiated by different libraries. Libraries now contribute towards sustainable national development especially in promoting universal literacy, media, information and digital literacy skills towards quality information service delivery. However, gaps still exist as library users lack the right skills to access quality information services that would promote national development through research, innovation and critical thinking in helping the government and civil society to actualize the goals of national development. Although, several efforts have been put in place in Nigeria in the provision of information services that cut across education, agricultural, public health care, and commercial activities which are key to national development. The provision of information resources awareness projects, collaborating with governmental and non-governmental institutions to ensure sustainable access to information on education, public health and emergencies, agriculture, social issues and capacity building for national development has assisted the library to close the gaps in the effective service delivery (Obizue & Obizue 2016). Moreover, libraries contribute immensely towards sustainable skills acquisition for universal literacy, promote good health, quality education, increase in production, and boost the economy of the country (Omeluzor, 2013).

2. Statement of the Problem

The Sustainable Development Goals (SDGs), adopted by the United Nations in 2015, provide a global blueprint for peace, prosperity, and sustainable development. Nigeria, like other developing nations, is faced with numerous socio-economic, educational, health, and environmental challenges that the SDGs seek to address. However, despite the government’s efforts, progress towards achieving these goals has been slow, hindered by issues such as poverty, inequality, low literacy levels, limited access to information, and weak institutional frameworks. Libraries and librarians can be strategically placed to play a significant role in eliminating these gaps by offering equal access to information, lifelong learning, literacy, research, and community engagement that can result in the achievement of the SDGs. Regrettably, in Nigeria, the roles of libraries and librarians in this aspect remain underutilised and undervalued. Moreover, the roles of contributions of academic libraries towards the realisation of the SDGs are under-documented and lack empirical evidence. This results in a knowledge gap on how much libraries are contributing towards sustainable development and what the challenges they had to go through. It is against this context that this paper aims to

analyze the contribution of academic libraries towards the transformation of Sustainable Development Goals in Nigeria.

3. Research Questions

The following research questions guided this study:

1. Are Academic Librarians aware of the United Nations Sustainable Development Goals?
2. What roles do academic libraries play in promoting attainment of the Sustainable Development Goals in Nigeria?
3. What are the challenges facing academic libraries in the attainment of Sustainable Development Goals in Nigeria?

4. Literature Review

4.1 Academic Libraries and Sustainable Development Goals (SDGs)

Libraries have evolved beyond being mere storehouses of books to becoming dynamic institutions that contribute actively to sustainable national development. In today's information-driven society, libraries play a crucial role in advancing literacy, skills development, and equitable access to information, which are central to achieving the United Nations Sustainable Development Goals (SDGs). Libraries now organise literacy campaigns, reading clubs, and book donations that improve functional literacy across communities which serve as safe and inclusive learning spaces for all groups, including children, women, and marginalized communities, thereby reducing inequalities in education (Thorpe & Gunton, 2022). Libraries foster continuous education through self-directed learning resources, helping citizens remain competitive in the knowledge economy. In an age of misinformation, libraries teach people how to critically evaluate media content, distinguish credible news, and resist propaganda. They empower users with the skills to search, evaluate, and ethically use information, which enhances research, decision-making, and innovation. With ICT facilities, e-resources, and training programs, libraries bridge the digital divide by equipping people with essential computer and internet skills for employment, entrepreneurship, and civic engagement. In addition, libraries curate and disseminate authoritative information sources in print and electronic formats to support research, governance, business, and education as well as providing platforms for accessing government data and e-services to encourage transparency, accountability, and citizen participation. Academic and research libraries preserve indigenous knowledge and institutional memory, ensuring cultural continuity and informed policy-making.

According to Omona (2020), academic libraries are central to the achievement of the Sustainable Development Goals (SDGs) because they are a gateway to information, research training, bridge digital divide and preserve cultural heritage. While the roles of academic libraries have always been relatively clear, questions remain about how academic libraries can best support the SDGs. First, academic libraries play a key role in ensuring information accessibility, cultural heritage preservation, research training, and digital inclusion. Information and documentation services enhance creativity and innovation in universities and the socio-economic world. According to Thorpe and Gunton (2022), academic libraries are a panacea for sustainable development of any nation. This was acknowledged by International Federation of Library Associations and Institutions (IFLA, 2021) noting that improving access to information and knowledge is instrumental in fostering sustainable development

and improving the overall quality of life. Sustainable Development Goals constitute an inclusive plan addressing peace, prosperity, people, and the planet with objectives covering economic, environmental and social aspects. Although, academic libraries were originally created to support the research and teaching/learning needs of faculty and students. But they are also uniquely well-suited to help humanity achieve sustainable solutions to its economic, social, and environmental challenges by producing skilled graduates and researchers, technological advancement and innovation and more importantly promoting civic education, cultural awareness, and informed citizenship.



Figure 1: 17 Sustainable Development Goals adopted by the UN in 2015

Academic libraries are uniquely positioned to contribute across all the 17 SDGs as adopted by the UN in 2015 which aim to end poverty, protect the planet, and ensure prosperity for all by 2030. Academic libraries are instrumental in advancing the Sustainable Development Goals (SDGs). Primarily, they participate in education by providing valuable and reliable information resources. Numerous research studies have investigated the perspectives of academic librarians on the Sustainable Development Goals (Olubiyo, 2022; Thorpe & Gunton, 2022; Lahyani, Diab & Moukhliiss, 2024). According to Lahyani et al. (2024), academic libraries have a significant impact in the attainment of the SDGs. They are considered worldwide as the most reliable information centers that acquires, processes, organizes, stores, retrieves and disseminates information to users. Similarly, Bangani (2024) study focused on South African academic libraries, examining how their Community Engagement (CE) initiatives contribute to specific SDGs: SDG 2 (Zero Hunger), SDG 3 (Good Health & Well-Being), and SDG 13 (Climate Action). Data was collected via online interviews with 20 Heads of Libraries and eight online focus groups with library staff. The study found that many of the CE activities of academic libraries can be successfully aligned with SDGs beyond the traditional roles of libraries (teaching, learning, research support). The study revealed that academic libraries are involved in several activities including health

awareness campaigns, public talks /panel discussions, exhibitions during health-related observance days. Blood donation drives by staff and students; involvement of libraries in supporting medical faculty/ hospitals by providing information resources were also key to SDGs goals.

4.2 Academic libraries' contributions to achieving the SDGs

Academic libraries are the backbone of higher education. They provide access to scholarly resources, open educational resources (OERs), and digital repositories that support equitable and inclusive education. The role of academic libraries extends beyond their contribution towards teaching and research but is also perceived as centers of information retrieval, creativity, cooperation, and interaction with the community. They are not mere stores of knowledge and distributors but also strategic organizations that facilitate social, educational, economic and technological change. Academic libraries, therefore, are strategic in the realisation of the United Nations Sustainable Development Goals (SDGs). Their services, resources, and initiatives have a direct and indirect influence on the realization of the United Nations Sustainable Development Goals (SDGs) particularly the subsequent goals:

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➤ **Quality Education (SDG 4)**

Academic libraries offer equal access to academic sources, databases and open educational resources (OERs). Academic libraries have a history of advertising the information literacy, digital literacy, and research skills in the years. Since its inception, they have been promoting lifelong learning by conducting outreach, workshops and training. Academic libraries facilitate active and fair quality education by availing textbooks, academic journals, databases, and online resources. Lahyani et al. (2024) claim that academic libraries are known to train information literacy, digital literacy, and research skills so that a student and a researcher can become a lifelong learner. Libraries can open knowledge through open access programs and institutional repositories, which decreases the barriers to learning.

➤ **Reduced Inequalities (SDG 10)**

One of the means by which academic libraries can reduce the digital divide is by providing access to ICT facilities, internet connectivity, and assistive technologies. They provide open access channels to democratize knowledge and also inclusivity among persons with disabilities and underserved groups. As an illustration, academic libraries make sure that all students have equal access to scholarly materials (books, journals, databases, open educational resources) regardless of their socio-economic status. This would facilitate the information gap between the privileged and marginalized groups. Academic libraries also implement inclusive services for students with disabilities such as the provision of assistive technologies, braille collections, screen readers and sign language support. This create safe and inclusive spaces for students from minority, indigenous, or disadvantaged communities to learn without discrimination and thereby reducing inequalities in our society.

➤ **Gender Equality (SDG 5)**

Academic libraries have contributed greatly to gender equality by developing gender-sensitive collections and programs, supporting women researchers through visibility initiatives (e.g., institutional repositories, citation impact tracking). According Kim (2023), academic libraries expand women's and girls' access to learning materials, research, and professional training which is a direct route to economic and social empowerment as it relates to the SDG. Libraries do this through open-access collections, gender-relevant collections, information literacy courses, and support for female students and researchers. Many academic libraries run targeted digital skills, ICT and e-literacy training for women, which reduces the gendered digital divide and enables women to access jobs, market information, telehealth and online services. This is a recurring example in UN/IFLA case reports.

➤ **Decent Work and Economic Growth (SDG 8)**

Within universities, libraries themselves are employers. By offering decent work conditions, professional development, and career growth for librarians, they embody SDG 8's principle of sustainable and inclusive employment. In addition, academic libraries foster lifelong learning by equipping students and researchers with information literacy, digital literacy, and research skills that are vital for employability. By providing access to training resources, workshops, and databases, libraries help graduates transition into the workforce with the competencies needed for the knowledge economy (IFLA,

2019). Academic libraries enable innovation and knowledge creation through access to scholarly resources, data repositories, and research support services. This contributes directly to economic growth by supporting research output, patents, and start-up initiatives emerging from universities.

➤ **Industry, Innovation, and Infrastructure (SDG 9)**

SDG 9 which is on industry, innovation, and infrastructure emphasizes building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Bangani (2024) noted that academic libraries, as knowledge hubs, play a crucial role in advancing these targets. Academic libraries provide researchers, innovators, and students with access to up-to-date scientific publications, patents, technical reports, and grey literature that drive new discoveries and technological advancement. Libraries particularly academic libraries support open science through data repositories, ensuring that research outputs are preserved, shared, and reused for innovation. Many academic libraries host maker spaces, digital labs, and innovation centers where students and researchers can experiment with emerging technologies.

5. Challenges facing Academic Libraries towards the Actualization of SDGs

Academic libraries are natural partners and are well placed in achieving Sustainable Development Goals (SDGs). They support many of the goals such as quality education, research and innovation, gender equality and many others. However, academic libraries faces some challenges despite their impact in actualizing the SDGs. Some of the major constraints facing by academic libraries in their quest in contributing to actualization of the SDGs are given below:

1) Insufficient and unstable funding

Insufficient and unstable funding is one of the most critical challenges facing academic libraries in their efforts to contribute meaningfully to the United Nations Sustainable Development Goals (SDGs). Libraries are expected to provide equitable access to information, foster lifelong learning, promote research and innovation, and support inclusion, yet all these responsibilities require steady financial resources. Many academic libraries lack dedicated budget lines for outreach, digitization, staff development, and infrastructure (wifi, servers, e-resources). Without stable finance they cannot sustain SDG programs (community engagement, open educational resources, digital skills training). Unstable funding undermines the ability of academic libraries to acquire up-to-date books, journals, databases, and digital tools. Without adequate financial investment, libraries struggle to provide reliable access to information, which directly affects SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure). Contributing to the SDGs requires academic libraries to adopt emerging technologies such as digital repositories, e-learning platforms, and ICT-driven services. Insufficient funding makes it difficult to invest in ICT infrastructure, maintain digital libraries, or bridge the digital divide, thereby limiting their contribution to SDG 10 (Reduced Inequalities) and SDG 17 (Partnerships for the Goals).

2) Digital divide and weak IT infrastructure

Poor IT infrastructure and digital divide are major issues that have challenged academic libraries in their quest to play a major role in ensuring the realization of the Sustainable

Development Goals (SDGs). The academic libraries play a central role in supporting the teaching and learning and research which are central in the actualization of SDGs. The activities related to SDG become more digital (SDG-related online events, remote learning, data services and research support) and require a corresponding IT infrastructure. Nevertheless, digital collections, online journals, e-books and open educational resources could be constrained by poor IT infrastructure, including unreliable internet connectivity, low bandwidth, regular power interruptions, and obsolete computer hardware. Thorpe and Gunton (2022) observed that academic libraries should have a strong ICT support to offer creative learning experiences hence supporting inclusive and equitable quality education to achieve a sustainable quality education. Thus, the IT infrastructure weakness delegitimizes this role because it restricts the application of such sophisticated technologies as cloud computing, artificial intelligence, and data analytics. This limitation does not allow libraries to support, to any extent, research and innovation and knowledge-sharing, undermining their role in technological and infrastructural development.

3) Low awareness and weak strategic alignment with SDGs

Poor level of awareness and lack of strategic focus on the Sustainable Development Goals (SDGs) is also a major issue that has an impact on the role of academic libraries in sustainable development. Most academic libraries, especially those based in developing countries, such as Nigeria, and most of the African states, are not very familiar with the scope, targets and indicators of the SDGs and with that said it becomes hard to frame their services and other initiatives in accordance with the global priorities in development. Unless academic libraries, in particular, in the African continent are actively sensitized and equipped to handle the SDGs, they will remain the enigma of beige international agendas and fail to localize them in the academic landscape (Bangani, 2024). This is also compounded by poor strategic alignment in which SDGs are not clearly enshrined in the academic library policy and strategic plans, or performance frameworks (Thorpe and Gunton, 2022). Poorly structured awareness campaigns, insufficient involvement of leadership, and the lack of partnership with university management also eliminate the ability of academic libraries to incorporate SDGs indicators in their planning and evaluation processes (Lahyania, Diabb & Moukhliiss, 2023). Thus, academic libraries have to create awareness among employees, create policies that clearly tie services to the SDGs, and have power in their institutions to be effective in the broader scope of sustainable development.

4) Human-resource gaps: skills, staffing and retention

One major challenge affecting academic library efforts in contributing to the Sustainable Development Goals (SDGs) is the human-resource gaps particularly in skills, staffing, and retention. Academic libraries are knowledge-driven organisations, and their ability to engage meaningfully with the SDGs depends heavily on the quality, capacity, and sustainability of their workforce. However, academic libraries still lack staff with advanced digital, data management, and research support skills necessary for tackling SDGs related to innovation (SDG 9), education (SDG 4), and reduced inequalities (SDG 10). Academic librarians often need training in advocacy, project management, and community engagement to support SDG-driven initiatives, yet such skills are underdeveloped in many academic settings (Thorpe & Gunton, 2022). Academic institutions require ongoing re-skilling of members of staff but such opportunities are scarce or underfunded in many academic institutions. In addition, “many academic libraries in developing countries face low staff-to-user ratios, limiting their ability to deliver SDG-aligned services such as literacy programs, open access

initiatives, and digital inclusion” (Bangani, 2024). Hence, roles such as data librarians, digital curators, or information literacy specialists are often absent due to budgetary and recruitment challenges, leaving libraries unable to fully support SDGs like quality education, industry innovation, and climate action. This is compounded with poor working conditions and inadequate remuneration leading to attrition of skilled staff to other sectors which has disrupted continuity in SDG-related initiatives.

5) Licensing and unequal access to scholarly content

One of the central challenges academic libraries face in contributing to the United Nations Sustainable Development Goals (SDGs) is licensing restrictions and unequal access to scholarly content. Although libraries are established as gateways to knowledge, their ability to provide equitable access is constrained by the dynamics of the global scholarly publishing ecosystem. Most scholarly content, particularly journal articles, databases, and e-books, is controlled by large commercial publishers. Access is provided under restrictive licensing agreements rather than outright ownership. Academic libraries must continually pay subscription fees, which often rise annually at unsustainable rates. This limits the extent to which academic libraries can build comprehensive collections and creates disparities between well-funded institutions and those with limited budgets thereby leaving researchers, students, and policymakers without timely access to essential knowledge (Adarkwah et al., 2024). Licensing frequently restricts resource sharing, interlibrary loans, and course-pack use, directly undermining libraries’ ability to democratize knowledge (Smith, 2020). Subscription costs and restrictive licensing limit access to research and educational materials that academic libraries would use to support education, health, innovation and policy. Escalating subscription costs squeeze academic library’s budgets from acquiring resources capable of contributing to SDGs. Restricted access reduces knowledge flow needed for SDG research and practice. A large share of scholarly literature remains behind paywalls; this limits researchers, practitioners and policymakers especially in low and middle-income countries from accessing evidence needed for SDG-relevant decision making (health, education, climate, etc.) which create barriers to the SDGs. These barriers reduce the reach of evidence needed to tackle SDG priorities (health, education, climate, innovation, gender equality, etc.), slows local research capacity building, and widens the North–South knowledge gap that SDG implementation depends on.

6. Research Methodology

This study adopted a descriptive survey research design. The design was considered appropriate because it provides the opportunity to obtain the views and experiences of academic librarians regarding their involvement in supporting SDG-related initiatives. The sample size is 414 academic librarians selected from six zones of Nigeria. Purposive sampling technique was used to select each federal university library from the six zones of Nigeria. Therefore, respondents were selected across the six federal university libraries with each from the six geopolitical zones of Nigeria. The institutions include: Federal University Gashua; Federal University, Dutse; Federal University, Lafia; Alex Ekwueme University, Ndufu-Alike; Federal University, Oye-Ekiti and University of Port Harcourt. Academic libraries were chosen because of their central role in supporting research, teaching, learning, and community engagement, all of which are critical to achieving the SDGs. The questionnaire contained items rated on a four-point Likert scale. Copies of the questionnaire were administered physically to ensure active participation and high response rate. Data collected were analyzed using both descriptive and inferential statistics. Frequency counts,

percentages, mean, and standard deviation were used to answer the research questions. The criterion mean of 2.5 was used to interpret the level of agreement among respondents. Tables and charts were also employed for easy interpretation of results.

7. Demographic information

This section focuses on providing background information about the respondents, including variables such as gender, state of respondents, age and marital status. These demographic information help to contextualize the findings and understand how different demographic factors may influence the responses or behaviors observed in the study. The demographic data obtained from 414 respondents is displayed in Figure 2.

By analysing the demographic data, results indicated that male librarians represented 203(49%) while the female librarians 211(51%). This indicates a reduction in the dominance of female in the field of librarianship as it has historically been a profession dominated by women. This is presented in Figure 2 below.

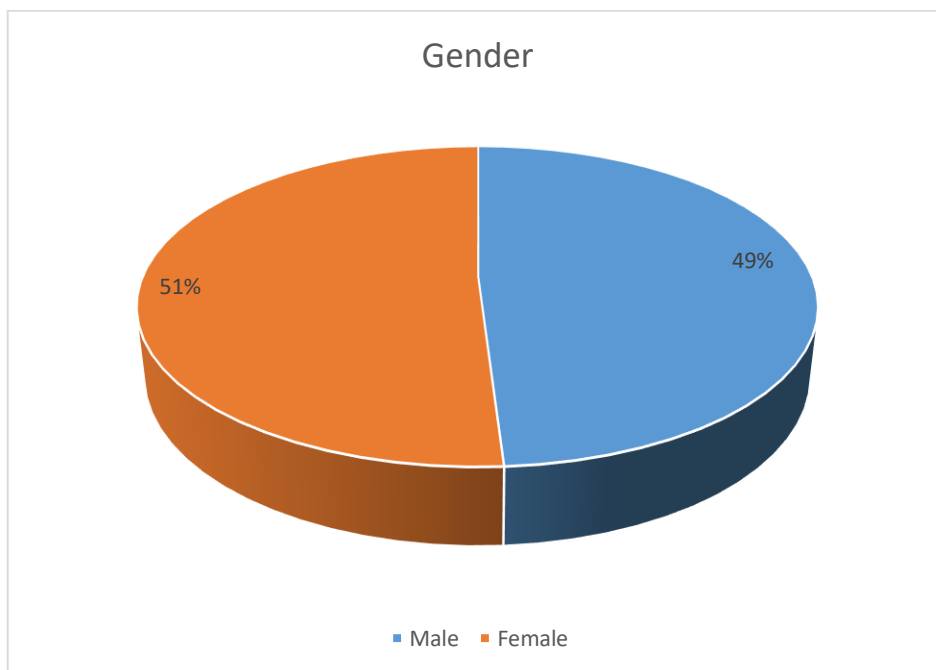


Figure 2: Gender Distribution of Respondents

With respect to the Federal University Libraries, results indicated that University of Port Harcourt library had the highest number of staff with 93 representing 22.5% of the respondents. This is narrowly followed by Federal University, Oye-Ekiti library 83(20%); Federal University, Dutse library 72(17.4%); Federal University, Lafia 60(14.5%); Federal University library, Gashua 54(13%) while the least is Alex Ekwueme University library, Ndufu-Alike with 52(12.6%). This is presented in Figure 3.

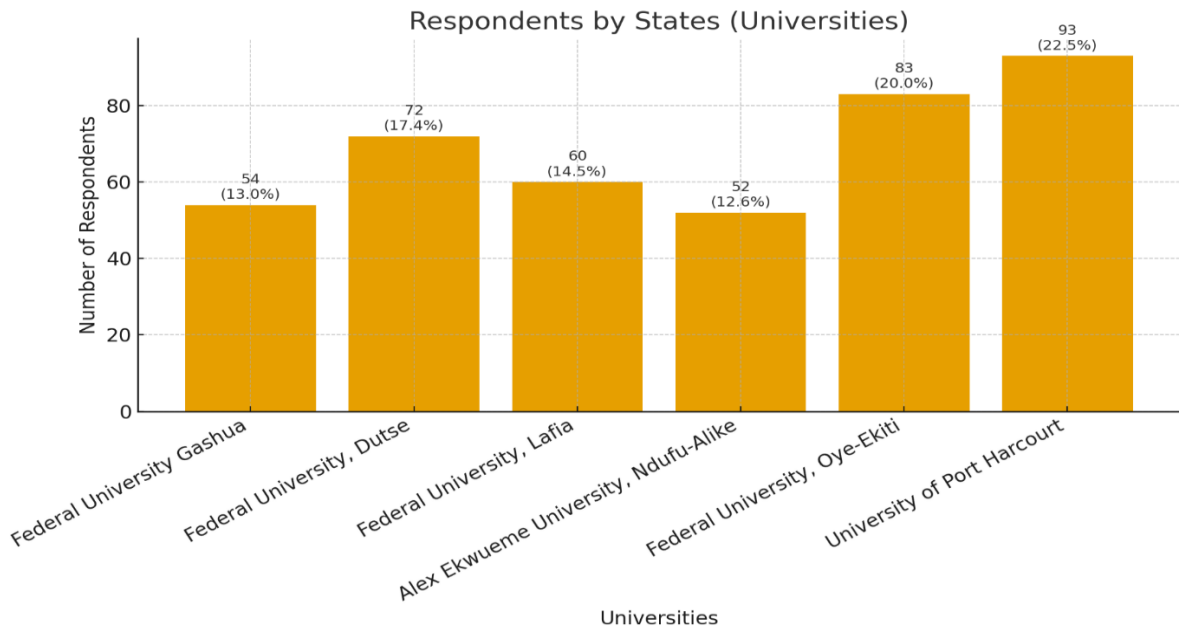


Figure 3: Respondents' University

Regarding age distribution of respondents, the results show that the majority 148 respondents (35.7%) are between the ages of 41-50 years, followed by 109 respondents between the ages of 31-40 years (26.3%), and 101 respondents' ages 21-30 years, representing (24.4%), while the least in age distribution was 50 years and above with 56 respondents representing (13.5%). Majority of 148 respondents within the age of 41-50 years is significant as it is the most active in workforce demographics. This age group often represents individuals with significant professional experience and stability in their careers. This is presented in Figure 4 below.

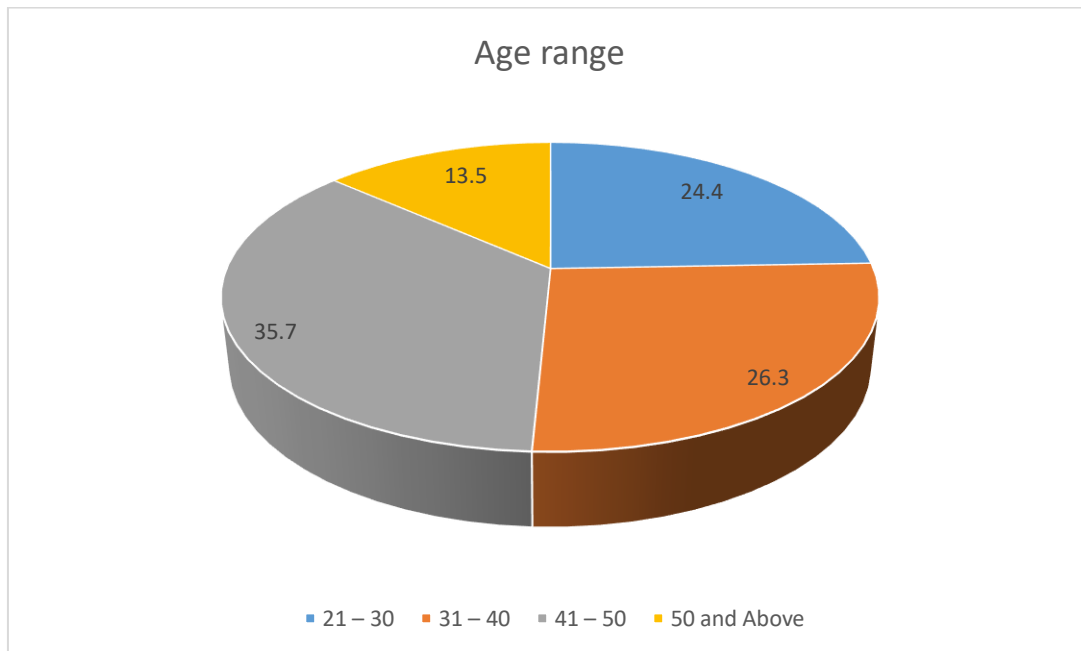


Figure 4: Age Distribution of Respondents

The marital demographics also indicated that majority of the respondents are married with 222(53.6%), 126(30.4%) being single, 52(12.6%) of the respondents are widowed while those that are divorced are 14 representing only 3.4% of the respondents. This is presented in Figure 5 below.

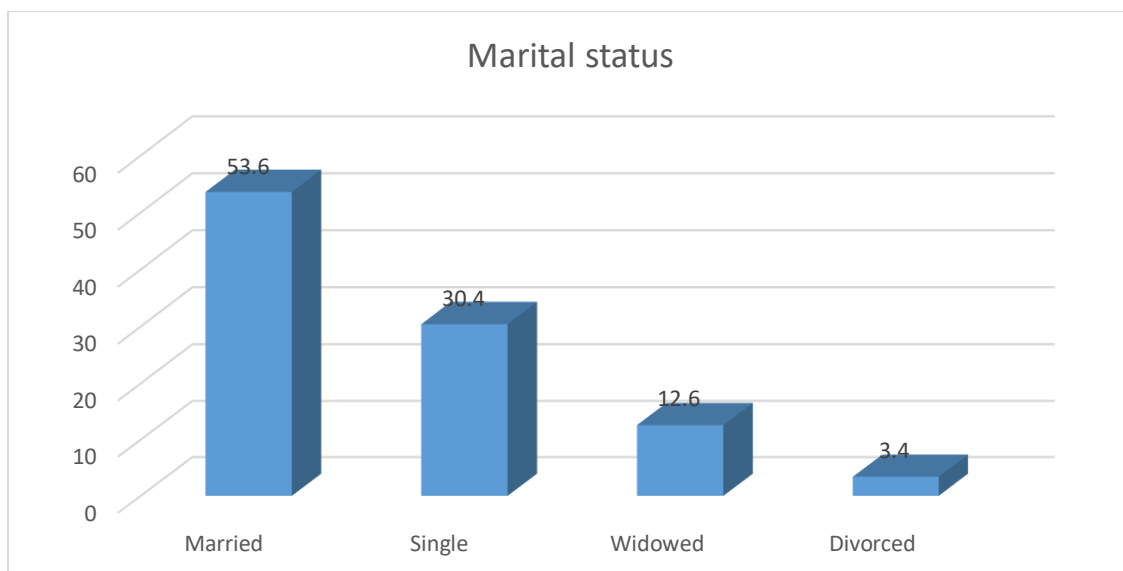


Figure 5: Marital Status of Respondents

8. Data Analysis and Discussion of Findings

This section focuses on the analysis and discussion of findings relating to the research objectives. The analysis is anchored on research questions and objectives, while the discussion contextualizes the findings within the framework of existing literature and theoretical perspectives.

Research Question One: Are Academic Librarians aware of the United Nations Sustainable Development Goals?

The data in Table 1 are used to answer this research questions.

Table - 1: Academic Librarians Awareness of Sustainable Development Goals

| S. N. | Awareness of Sustainable Development Goals | SA | A | D | SD | Mean | Std. Dev |
|-------|--|----------------|----------------|----------------|----------------|------|----------|
| 1 | I am aware that the United Nations adopted 17 Sustainable Development Goals (SDGs) in 2015 | 226 (54.6%) | 101 (24.4%) | 59 (14.3%) | 28 (6.8%) | 3.27 | 0.91 |
| 2 | I have received formal training or orientation about the SDGs. | 0 (0.0%) | 0 (0.0%) | 226 (54.6%) | 188 (45.4%) | 1.55 | 0.50 |
| 3 | My library has programs or initiatives related to the SDGs | 161 (38.9%) | 199 (48.1%) | 21 (5.1%) | 33 (8.0%) | 3.15 | 0.87 |
| 4 | I understand how library services can contribute to achieving the SDGs. | 157 (37.9%) | 166 (40.1%) | 55 (13.3%) | 36 (8.7%) | 3.08 | 0.93 |
| 5 | I am aware that academic libraries can promote Quality Education (SDG 4) | 203 (49%) | 191 (46.1%) | 20 (4.8%) | 0 (0.0%) | 3.44 | 0.60 |

| S. N. | Awareness of Sustainable Development Goals | SA | A | D | SD | Mean | Std. Dev |
|-----------------------|--|----------------|----------------|----------------|---------------|------|----------|
| 6 | I know that libraries can support Gender Equality (SDG 5) through equitable access to information | 179 (43.2%) | 160 (38.6%) | 57 (13.8%) | 18 (4.3%) | 3.21 | 0.85 |
| 7 | I am familiar with how library initiatives can promote Reduced Inequalities (SDG 10) | 154 (37.2%) | 171 (41.3%) | 48 (11.6%) | 41 (9.9%) | 3.06 | 0.94 |
| 8 | I am aware that libraries can contribute to Partnerships for the Goals (SDG 17) by collaborating with other institutions | 50 (12.1%) | 67 (16.2%) | 177 (42.8%) | 120 (29%) | 2.08 | 0.95 |
| 9 | I know of national or institutional policies connecting academic libraries to SDGs | 69 (16.7%) | 89 (21.5%) | 159 (38.0%) | 97 (23.4%) | 2.28 | 0.99 |
| 10 | My library management encourages awareness and implementation of the SDGs | 104 (25.1%) | 101 (24.4%) | 110 (26.6%) | 99 (23.9%) | 2.53 | 1.09 |
| Aggregate Mean | | 2.77 | | | | | |
| Criterion mean | | 2.50 | | | | | |

Table 1 revealed important insights into academic librarians' awareness and engagement with the United Nations Sustainable Development Goals (SDGs). Overall, the results indicate a generally positive level of awareness (aggregate mean = 2.77) which is above the criterion mean of 2.50. This suggests that academic librarians in Nigeria are aware of the SDGs and understand the potential contributions of their services to the SDGs. A substantial proportion of respondents (54.6% strongly agreed and 24.4% agreed) indicated awareness with regards to the 17 SDGs adopted by the United Nations in 2015 (M = 3.27, SD = 0.91). This aligns with previous studies that reported a growing global awareness of the SDGs within the library community (IFLA, 2019; UNESCO, 2020).

On the same note, Hammons (2024) did establish that the Nigerian academic librarians are broadly aware of the objectives, especially the ones concerning education and access to information. Nevertheless, awareness is not always reflected in practical interaction since it was also observed that all the respondents had not undergone formal training or orientation on SDGs (M = 1.55, SD = 0.50) which is a crucial gap in professional growth. This conclusion supports O'Toole (2023), who highlighted that insufficient training of staff undermines the capacity of libraries to ensure that SDG-related initiatives are incorporated in its business. Although most of the respondents had no formal training, most of them answered that academic libraries possess programs or initiatives associated with SDGs (M = 3.15, SD = 0.87). This implies that institutional initiatives are coming up although unevenly spread. Omona (2020) and Adarkwah (2024) also noted that there are cases in Africa where academic libraries have started positioning their services around SDG themes (digital literacy, gender equality, and inclusive education). However, the difference in responses reveals that there is not a consistent implementation of the practice in institutions probably because of the difference in resources.

Another aspect that the respondents displayed was the comprehension of the role that academic library services can play in the SDGs achievement (M = 3.08, SD = 0.93). This conclusion coincides with that provided by Akor and Udensi (2021), who concluded that

academic librarians have a conceptual understanding of the SDGs but do not usually have strategies in practice to operationalize them. Quality Education (SDG 4) was a goal that people were most aware of with 95% agreeing and strongly agreeing that libraries facilitate this objective (M = 3.44, SD = 0.60). This is in line with the international agreement that the academic libraries play the key role in developing SDG 4 to achieve equal access to information and lifelong learning (IFLA, 2021; Ezema, 2024). Similarly, respondents acknowledged that academic libraries support Gender Equality (SDG 5) through equitable information access (M = 3.21, SD = 0.85) and promote Reduction of Inequalities (SDG 10) by ensuring inclusivity in services (M = 3.06, SD = 0.94). These results echo findings by Adarkwah (2024) and Akorand Udensi (2021), who highlighted the role of academic libraries in addressing inequality by offering safe learning environments and digital inclusion initiatives.

Conversely, awareness and participation in Partnerships for the Goals (SDG 17) were notably low (M = 2.08, SD = 0.95). Only 28.3% of respondents agreed that their libraries collaborate with other institutions to advance the SDGs. This suggests weak inter-institutional linkages, a problem also identified by IFLA (2021), which emphasized that partnerships are essential for progress across all SDGs. Limited collaboration and external engagement may result from poor funding and a lack of coordinated national strategies (Omona, 2020). Awareness of national or institutional policies linking academic libraries to the SDGs was also low (M = 2.28, SD = 0.99). This indicates an absence of formal policy frameworks or weak communication between policymakers and academic library administrators. This is supported by Ezema (2024) and Hammons(2024) noting that policy integration remains a major challenge in the Nigerian context, as most academic libraries operate without explicit SDG-aligned strategies. Library management support for SDG awareness and implementation was moderate (M = 2.53, SD = 1.09). Although the mean slightly exceeded the criterion value, the high standard deviation suggests inconsistency among institutions. Adarkwah (2024) attributed this to administrative apathy, limited funding, and weak institutional leadership, all of which constrain academic libraries' capacity to function as agents of sustainable development.

Research Question Two: What roles do academic libraries play in promoting awareness and attainment of the Sustainable Development Goals in Nigeria?

The data in Table 2 are used to answer this research questions

Table - 2: Roles of Librarians in Attaining SDGs

| S. N. | Roles of Librarians in Attaining SDGs | SA | A | D | SD | Mean | Std. Dev |
|-------|--|----------------|----------------|---------------|---------------|------|----------|
| 1 | Libraries provide information resources on health and well-being (SDG 3) | 202 (48.8%) | 108 (26.1%) | 69 (16.7%) | 35 (8.4%) | 3.16 | 0.95 |
| 2 | Librarians facilitate access to information that supports poverty reduction (SDG 1) | 179 (43.2%) | 156 (37.7%) | 72 (17.4%) | 7 (1.7%) | 3.23 | 0.77 |
| 3 | Librarians promote literacy and lifelong learning (SDG 4: Quality Education) | 186 (44.9%) | 177 (42.8%) | 23 (5.6%) | 28 (6.8%) | 3.26 | 0.79 |
| 4 | Librarians promote gender equality by supporting inclusive access to knowledge (SDG 5) | 164 (39.6%) | 132 (31.9%) | 73 (17.6%) | 45 (10.9%) | 3.01 | 0.95 |
| 5 | Libraries create awareness on climate | 159 | 129 | 81 | 45 | 2.97 | 0.97 |

| S. N. | Roles of Librarians in Attaining SDGs | SA | A | D | SD | Mean | Std. Dev |
|-------|---|----------------|----------------|----------------|---------------|------|----------|
| | action and sustainability (SDG 13) | (38.4%) | (31.2%) | (19.6%) | (10.9%) | | |
| 6 | Librarians provide ICT and digital skills that support innovation (SDG 9) | 122 (29.5%) | 162 (39.1%) | 55 (13.3%) | 75 (18.1%) | 2.78 | 1.02 |
| 7 | Libraries foster peaceful and inclusive societies through knowledge sharing (SDG 16) | 133 (32.1%) | 133 (32.1%) | 99 (23.9%) | 49 (11.8%) | 2.87 | 0.99 |
| 8 | Library campaigns raise awareness of SDGs among community members | 130 (31.8%) | 137 (33.1%) | 69 (16.7%) | 78 (18.8%) | 2.75 | 1.04 |
| 9 | Libraries promote literacy and community empowerment | 141 (34.1%) | 117 (28.3%) | 92 (22.2%) | 64 (15.5%) | 2.82 | 1.03 |
| 10 | Library-organized campaigns to promote cooperation with the government and NGOs on the SDGs | 68 (16.4%) | 101 (24.4%) | 157 (37.9%) | 88 (21.3%) | 2.36 | 0.97 |
| 11 | Social media and ICT campaigns by libraries enhance knowledge of SDGs | 137 (33.1%) | 111 (26.8%) | 89 (21.5%) | 77 (18.6%) | 2.76 | 1.04 |
| 12 | Library services often address societal challenges related to sustainable development | 66 (15.9%) | 100 (24.2%) | 159 (38.4%) | 89 (21.5%) | 2.34 | 0.97 |
| | Aggregate Mean | 2.87 | | | | | |
| | Criterion mean | 3.16 | | | | | |

Table 2 presents the roles of academic libraries in the attaining of Sustainable Development Goals (SDGs), with 12 key items assessed using a 4-point Likert scale (SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree). The mean and standard deviation (SD) help to interpret the general agreement level and the consistency of responses respectively. This was shown by the mean scores of the twelve items ranging between 2.34 and 3.26 implying the different degree of agreement among respondents on the role played by academic libraries in contributing to the SDGs. As a rule, the mean values that exceed 2.5 indicate an agreement whereas the mean values below 2.5 state the opposite. The SD values (0.77-1.04) demonstrate moderate variation of the opinions of the respondents based on the different experience and capabilities of the institutions in libraries. Table 1 showed that academic libraries play a major role in achieving Sustainable Development Goals (SDGs, in the fields of education, poverty reduction, health and gender equality). The best mean (M = 3.26, SD = 0.79) was obtained due to the statement that academic libraries encourage literacy and lifelong learning, which conforms to SDG 4, Quality Education. This finding highlights the traditional role of academic libraries as facilitators of education and lifelong learning. As highlighted by Ogbomo (2020), academic libraries in Nigeria both promote the culture of reading and lifelong learning by providing digital and print resources. On the same note, the International Federation of Library Associations and Institutions (IFLA, 2019) expressed a view that inclusive and equitable quality education can be achieved through access to free learning resources by all in an academic library. Therefore, academic libraries continue to be important entities in ensuring sustainability in education. The second in terms of mean (M = 3.23, SD = 0.77) is the role of librarians in enabling access to information that helps decrease poverty that SDG 1 represents. This observation is consistent with the research of Nanmwa

and Nansoh (2025) who found out that information access is a strategic empowerment of poverty alleviation as academic libraries present the knowledge that translates to wealth in the forms of employment, entrepreneurship and agricultural innovation.

Academic libraries in terms of advancing health and well-being (SDG 3) were also highly recognized ($M = 3.16$, $SD = 0.95$). The respondents agreed that academic libraries are reliable in terms of health information and enhancing health literacy. According to IFLA (2021), academic libraries play a key role in availing reliable health information, which can guide people to make credible lifestyle and medical choices. In Nigeria, Bangani and Dube (2024) reported that academic libraries play a role in the promotion of health by creating curated materials and outreach programs, which are aimed at promoting hygiene, preventing diseases, and wellness. Another outcome that the respondents agreed that librarians foster gender equality by ensuring equal access to knowledge (SDG 5) is 3.01 ($SD = 0.95$). The discovery is in line with Mbambo-Thata (2019) who concluded that academic libraries are non-discriminatory and women and girls can use them to access educational resources, information technology materials, and empowerment training. With such efforts, the academic libraries are helping to reduce information poverty and gender inclusiveness to marginalized groups. Even so, there was a moderate level of agreement on the roles of academic libraries in raising awareness of climate action and sustainability (SDG 13) ($M = 2.97$, $SD = 0.97$); offering ICT and digital skills that support innovation (SDG 9) with a moderate level of agreement ($M = 2.78$, $SD = 1.02$) and also promoting peaceful and inclusive societies (SDG 16) with a moderate mean ($M = 2.87$, $SD = 0.99$). These results portray gains in the process of achieving SDGs by academic libraries but also portray certain challenges. According to Anyaoku and Okonkwo (2021), most academic libraries in Nigeria do not have sufficient technological infrastructure and financial resources to maximize their potential when it comes to promoting innovation in the realization of SDGs. On the same note, the academic libraries in promoting peaceful and inclusive societies (SDG 16) gave moderate mean ($M = 2.87$, $SD = 0.99$). Libraries also help in peace building by making information available to the citizens that will encourage tolerance and civic participation. Onyebuchi (2022) confirmed this by indicating that academic libraries in Nigeria have fulfilled this role by assisting the community to unite by reading and preserving cultural heritage.

Conversely, the lowest mean scores were observed in areas related to partnerships, social media advocacy, and addressing societal challenges directly. The statement on library-organized campaigns to promote cooperation with government and NGOs on SDGs recorded a mean of 2.36 ($SD = 0.97$) indicating weak collaboration while social media and ICT campaigns enhancing knowledge of SDGs recorded a mean of ($M = 2.76$, $SD = 1.04$). Echezona and Uzoagba (2020) noted that academic libraries in Nigeria often operate in isolation due to inadequate policy frameworks for partnership. Similarly, Quadri and Adebayo (2021) found that many academic libraries in Nigeria underutilize social media for advocacy due to skill gaps and lack of institutional strategies. Finally, the statement that library services address societal challenges related to sustainable development received the lowest overall agreement ($M = 2.34$, $SD = 0.97$). This suggests that while librarians recognize the importance of SDGs, practical engagement remains limited. Kayode and Oguntayo (2025) argued that this limitation stems from inadequate funding, lack of awareness, and absence of national-level integration of academic libraries into sustainable development planning.

Research Question Three: What are the challenges facing academic libraries in the attainment of Sustainable Development Goals in Nigeria?

The data in Table 3 are used to answer this research questions

Table - 3: Challenges facing academic libraries in the attainment of SDGs

| S.N. | Challenges facing academic libraries in the attainment of SDGs | SA | A | D | SD | Mean | Std dev |
|------|---|----------------|----------------|----------------|----------------|------|---------|
| 1 | Lack of institutional policies aligning academic libraries with SDGs | 189 (45.7%) | 123 (29.7%) | 36 (8.7%) | 66 (15.9%) | 3.06 | 1.02 |
| 2 | Poor university support to SDG-related projects in libraries. | 131 (31.6%) | 188 (45.4%) | 59 (14.3%) | 36 (8.7%) | 3.00 | 0,90 |
| 3 | Limited collaboration with national and international organizations on SDG initiatives | 176 (42.5%) | 171 (41.3%) | 34 (8.2%) | 33 (7.9%) | 2.97 | 0.93 |
| 4 | Insufficient funding on programmes relating to SDG programmes | 191 (46.1%) | 170 (41.1%) | 39 (9.4%) | 14 (3.4%) | 3.29 | 0.78 |
| 5 | Inadequate ICT infrastructure to support SDGs. | 189 (45.7%) | 169 (40.8%) | 32 (7.7%) | 24 (5.8%) | 3.27 | 0.82 |
| 6 | Shortage of skilled personnel hinders SDG-related services | 131 (31.6%) | 170 (41.1%) | 19 (4.6%) | 94 (22.7%) | 2.82 | 1.10 |
| 7 | Lack of training and awareness among librarians about SDGs programmes | 107 (25.8%) | 147 (35.5%) | 77 (18.6%) | 83 (20%) | 2.57 | 1.05 |
| 8 | Resistance to change among library staff delays SDG-focused innovations. | 55 (13.3%) | 69 (16.7%) | 117 (28.3%) | 173 (41.8%) | 2.01 | 1.04 |
| 9 | Lack of active user participation in library SDG programmes | 61 (14.7%) | 73 (17.6%) | 157 (37.9%) | 123 (29.7%) | 2.18 | 0.97 |
| 10 | Language and literacy barriers among some users affect the dissemination of SDG information | 70 (16.9%) | 67 (16.2%) | 148 (35.7%) | 129 (31.2%) | 2.20 | 0.99 |
| | Aggregate Mean | 2.74 | | | | | |
| | Criterion Mean | 2.50 | | | | | |

Table 3 revealed an aggregate mean of 2.74, which is above the criterion mean of 2.50, indicating that the respondents agreed that the listed items constitute significant challenges. This suggests that academic libraries encounter substantial institutional, infrastructural, and human resource barriers that limit their effective contribution to SDGs. The results show that insufficient funding for SDG-related programmes (mean = 3.29) and inadequate ICT infrastructure (mean = 3.27) were the most critical challenges identified. These results are consistent with the existing studies that suggest that underfunding and inadequate ICT infrastructure continue to be among the primary barriers to efficient library services in most African and Nigerian universities (Adarkwah, et al., 2024; Ezema, 2024). Digital literacy training, research data support and information dissemination are sustainable development activities that warrant sufficient funding and sufficient ICT systems. Thus, the International Federation of Library Associations and Institutions (IFLA, 2021) also stresses the fact that ICT and reliable funding are the keys to the role of academic libraries in SDGs. In addition, the absence of institutional policies in line with SDGs (mean = 3.06), no support on SDG-related projects in the university (mean = 3.00) and insufficient cooperation with national and international organizations (mean = 2.97) were also at the top. This suggests that the academic library struggles to meet the global development priorities due to inadequacy in

structures and policies. This confirms the stance of IFLA (2019) that academic libraries need to have enabling institutional structures and strategic policies to integrate SDG goals into their practice. Increasing academic libraries can better mobilize resources and partnerships to drive the agenda should universities implement SDG priorities within their governance structures. The human resource aspect also turned out to be a challenge. The scarcity of trained human resources (mean = 2.82) and absence of training and awareness of SDG programmes (mean = 2.57) indicate that not all academic librarians would have the necessary skills or awareness to successfully institute SDG-related programs. Such findings have been reported in the previous literature, where it is noted that the lack of professional development and digital literacy training impairs the potential of the libraries in contributing to the sustainable development (Omona, 2020; O’Toole, 2023). ICT competence, data management, and SDG awareness capacity-building programs are therefore required to enhance the contribution of librarians.

On the other hand, resistance to change among staff (mean = 2.01), lack of active user participation (mean = 2.18), and language and literacy barriers (mean = 2.20) were rated below the criterion mean, indicating that these were not perceived as major obstacles. Nonetheless, these factors remain important considerations for inclusivity and equitable information access. This finding is supported by Oyeniran (2023) study stating that literacy and language challenges can hinder effective dissemination of SDG information, especially in diverse and multilingual societies. Therefore, while these challenges may be less pronounced, they should not be overlooked in academic library planning. Overall, the findings highlight that financial, infrastructural, and policy-related challenges are the most significant barriers to academic libraries’ attainment of the SDGs. Addressing these through improved funding mechanisms, ICT investment, policy alignment, and staff training would strengthen academic libraries’ capacity to promote inclusive access to information and contribute meaningfully to sustainable development. Below is the mean rating of challenges facing academic libraries in the attainment of SDGs in Nigeria.

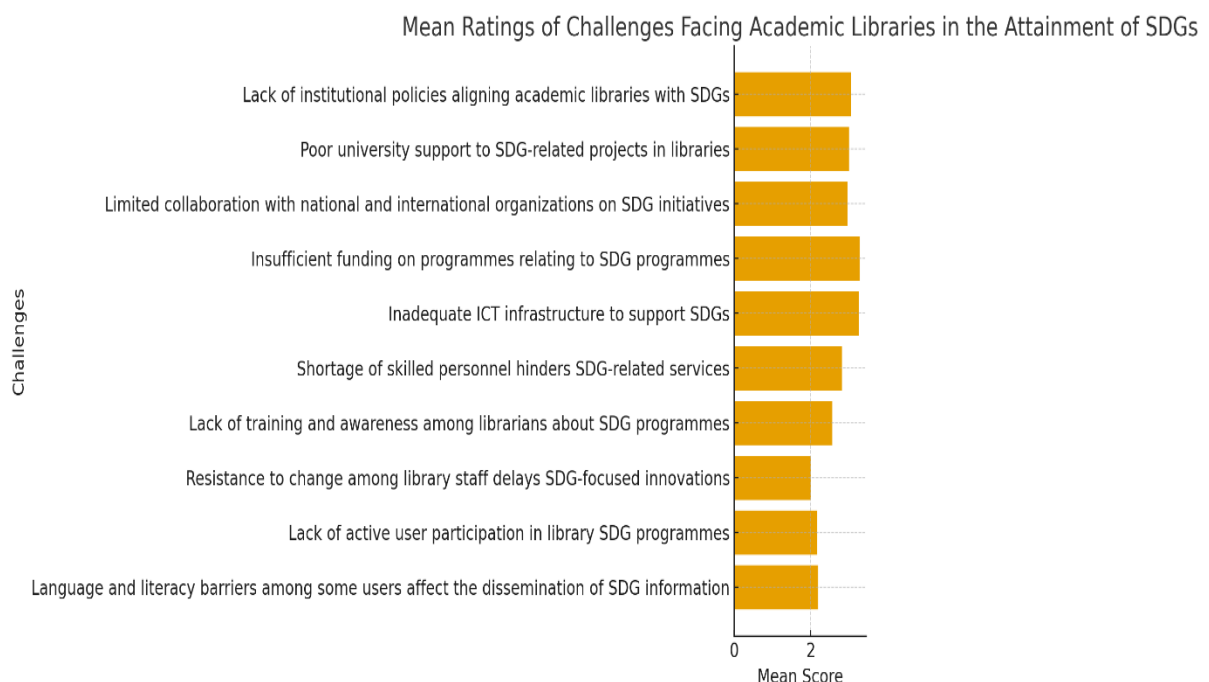


Figure 6: Mean Ratings

9. Major Findings for Research Questions

Based on the research questions, the following major findings were outlined:

- Academic librarians demonstrated a generally positive awareness of the United Nations Sustainable Development Goals and showed a good understanding of how library services can contribute to achieving the SDGs. Despite the awareness, respondents reported no formal training or orientation on SDGs.
- The study also revealed that academic libraries in Nigeria play notable roles in education, poverty reduction, and health-related SDGs, but their contributions to partnerships, advocacy, innovation, and direct societal engagement remain weak. Activities such as library campaigns to raise SDG awareness and social media/ICT advocacy were moderately rated, showing underutilization of advocacy and digital platforms.
- Academic libraries play their strongest role in promoting literacy and lifelong learning, as reflected by the highest mean score ($M = 3.26$). This confirms libraries' traditional and central function as facilitators of quality education and continuous learning.
- The study also revealed that academic libraries face significant challenges in contributing to the attainment of the Sustainable Development Goals (SDGs) in Nigeria particularly in the aspect of insufficient funding for SDG-related programmes and inadequate ICT infrastructure. This highlights the difficulty academic libraries face in financing and leveraging digital technologies to support SDG initiatives.
- The study also indicated that lack of institutional policies aligning libraries with SDGs, poor university support for SDG-related projects and limited collaboration with national and international organizations on SDG initiatives were perceived as significant challenges.

10. Conclusion

This study has demonstrated that academic libraries are essential catalysts in advancing the United Nations Sustainable Development Goals (SDGs) through the provision of equitable access to information that support education, poverty reduction, health, and gender equality, particularly within the Nigerian context. The study indicates that academic librarians show a generally positive awareness and understanding of the SDGs. By aligning their services with goals such as quality education (SDG 4), facilitating access to information that supports poverty reduction which SDG 1, promoting health and well-being (SDG 3) as well as promoting gender equality by supporting inclusive access to knowledge (SDG 5) contribute meaningfully to achieving SDGs. On the other hand, academic libraries' contributions to SDGs were not visible in the areas related to partnerships, social media advocacy and addressing societal challenges directly. Hence, their impact is constrained by insufficient funding, inadequate ICT infrastructure, lack of institutional policies aligning academic libraries with SDGs, poor university support for SDG-related projects, and limited collaboration with national and international organizations were regarded as major challenges affecting academic libraries' efforts in actualizing SDGs. Addressing these challenges through increased government and institutional funding and support, policy reform, and capacity-building initiatives is essential for empowering academic libraries to contribute more effectively to the realization of the SDGs. By strengthening these areas, academic libraries in Nigeria will continue to serve as strategic partners in achieving inclusive and sustainable development.

Recommendations

Based on the findings of this study, the following recommendations are made to enhance the role of academic libraries in advancing the United Nations Sustainable Development Goals (SDGs) in Nigeria:

- i. **Increased Funding and Resource Allocation:** The government and higher education authorities must, within their priority, allocate more finances towards academic libraries in the acquisition of current information resources, digital projects, and projects that are in support or are aimed at achieving SDGs.
- ii. **Formulation of Institutional Policies:** Institutions must come up with an effective policy to guide and support academic libraries as institutional strategies for achieving the Sustainable Development Goals (SDGs). These policies will offer a strategic framework or guideline to the academic libraries on how the concept of sustainable development will be implemented into their operations and services.
- iii. **Strengthening ICT Infrastructure:** Modern information and communication technologies need to be installed in academic libraries to allow access to digital information, support research, and allow creative SDG-driven services like online learning platforms and open access repositories.
- iv. **Capacity Building and Professional Development:** Constant training of academic librarians in issues of sustainable development, digital literacy and advocacy strategies should be given. This will increase their capacity to plan and put in place programs which will directly help in the realization of SDGs.
- v. **Enhancing Collaboration and Partnerships:** There should be a strong involvement of academic libraries with national and international organizations, non-governmental organizations and other educational institutions in sharing resources and expertise, as well as best practices. The collaborations can enhance the presence and influence of the role of academic libraries in sustainable development.
- vi. **Promoting Advocacy and Public Engagement:** Academic libraries must take advantage of social media and other communication tools to create awareness of the SDGs and encourage community involvement projects. Academic libraries can reach out to a wider audience outside the academic field through advocacy and outreach to handle challenges affecting the whole society.

References

1. Adarkwah, M.A., Okagbue, E.F., Oladipo, O.A., Mekonen, Y.K., Anulika, A.G., Nchekwubemchukwu, I.S., Okafor, M.U., Chineta, O.M., Sayibu, M., & Islam, A.Y.M. Atiquil (2024). Exploring the Transformative Journey of Academic Libraries in Africa before and after COVID-19 and in the Generative AI Era. *Journal of Academic Librarianship*, 50(4), Article 102900. <https://doi.org/10.1016/j.acalib.2024.102900>
2. Adetoro, N., & Ayeni, P.O. (2020). The library in the cloud: Examining the realities of cloud computing adoption and application in Nigerian libraries and information centres. In *Media Resources and Information and Communication Technology Use* (225-235).
3. Akor, M.O., & Udensi, A.O. (2021). Perception, awareness, and readiness by academic libraries towards the 2030 global agenda for Sustainable Development Goals (SDGs). *Library Philosophy and Practice (e-journal)*, 3953. Retrieved from <https://digitalcommons.unl.edu/libphilprac/3953>
4. Anyaoku, E., & Okonkwo, I. (2021). Current challenges and future directions for institutional repositories in Nigerian academic libraries. *Journal of the Association for Information Science and Technology*, 72(8), 1011-1023.

- <https://doi.org/10.1002/asi.70016>
5. Bangani, S. (2024). Academic libraries' support for quality education through community engagement. *Information Development*, 40(4), 590-601.
 6. Bangani, S., & Dube, L. (2024). Academic libraries and the actualisation of Sustainable Development Goals two, three and thirteen: Empirical evidence of roles and barriers. *Journal of Librarianship and Information Science*, 56(3), 773-784.
<https://doi.org/10.1177/09610006231174650>
 7. Echezona, R.I., & Uzoagba, C. (2020). Strategies Academic Libraries in Nigeria can adopt to curb the spread of Covid-19 and remain relevant in post Covid-19 pandemic. *Library Philosophy and Practice (e-journal)*. Retrieved from <https://digitalcommons.unl.edu/libphilprac/5988>
 8. Ezema, I.J. (2024). Status and challenges of institutional repositories in Nigeria. *The Journal of Academic Librarianship*. Retrieved from <https://www.sciencedirect.com>
 9. Hammons, J. (2024). Academic librarians as educational developers: Overview, case study, and discussion. To Improve the Academy: A *Journal of Educational Development*, 43(1), 5. doi:10.3998/tia.4263
 10. International Federation of Library Associations and Institutions (IFLA). (2019). *Libraries and the Sustainable Development Goals: A storytelling manual*. IFLA.
 11. International Federation of Library Associations and Institutions (IFLA). (2021). *Toolkit: Libraries and implementation of the UN 2030 Agenda*. IFLA.
 12. Irenea, K.O., Emilian, B., & Eru, J. (2019). Funding academic libraries in Nigeria for effective services: Alternatives to resource development and library management. *Communicate: Journal of Library and Information Science*, 21(1), 104-111.
 13. Itsekor, V.O., Asaolu, A.O., & Osinulu, I. (2015). The role of academic libraries in community development: Issues and strategies. *International Journal of Information Technology & Business Management*, 34, 83-97.
 14. Kayode, A.I., & Oguntayo, S.A. (2025). Perception, Awareness, and Readiness by Academic Libraries towards the 2030 Global Agenda for Sustainable Development Goals (SDGs)". *Library Philosophy and Practice (e-journal)*. 8212. Available at <https://digitalcommons.unl.edu/libphilprac/>
 15. Lahyani, K., Diab, G., & Moukhliiss, G. (2024). *Role of academic libraries in the achievement of Sustainable Development Goals: Case study — The Mohamed Sekkat University Library*. *Procedia Computer Science*, 236, 566-573.
<https://doi.org/10.1016/j.procs.2024.05.067>
 16. Mbambo-Thata, B. (2019). *Gender inclusivity and equity in academic libraries*. *College & Research Libraries News*, 80(9), 522-525.
 17. Nanmwa, N., & Nansoh, S. (2025). The Role of Library Information Resources and Services in Promoting Entrepreneurship Education and Skill Acquisition among Students in Polytechnic in Benue State. *Current Journal of Library and Information Sciences (CJLIS)*, 10(1), 1-11.
 18. O'Toole, E. (2023). Creating a sustainable professional development program. *Journal of Academic Librarianship*. <https://doi.org/10.1080/01930826.2022.2146438>
 19. Obizue, C.C., & Obizue, C.F. (2016). The role of academic libraries in the achievement of sustainable development goals (SDGs). *Library Philosophy and Practice*, 1-10.
 20. Ogbomo, M.O. (2020). Reading habits and academic performance of Library and Information Science undergraduates in federal universities in Southern Nigeria. *Journal of Contemporary Issues in Education*, 4(1). Retrieved from: <https://www.eksujcie.com/wp-content/uploads/2023/01/Monday-Obaidjevwe-.pdf>
 21. Olubiyo, P.O. (2022). Roles of Academic Libraries in National Development". *Library Philosophy and Practice (e-journal)*. 6714. Retrieved from:

- <https://digitalcommons.unl.edu/libphilprac/6714>
22. Omeluzor, S.U. (2013). Perception and attitude of library staff towards digital library services: A case study of Nigerian universities. *Library Philosophy and Practice (e-journal)*, Paper 926. Retrieved from <https://digitalcommons.unl.edu/libphilprac/926>
 23. Omona, W. (2020). The roles of library and information services in achieving Sustainable Development Goals (SDGs) in Uganda. *Library Philosophy and Practice*. Retrieved from:
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=8035&context=libphilprac>
 24. Onyebuchi, G. (2022). Community engagement programs for library patrons. *Library Philosophy and Practice (e-journal)*. Retrieved from:
<https://digitalcommons.unl.edu/libphilprac/>
 25. Oyeniran, G.K. (2023). Sustainable development goals in Nigeria: The role of public libraries. *International Journal of Library and Information Science*, 15(1), 23-33.
 26. Quadri, G.O., & Adebayo, O.I. (2021). Analysis of social media use among academic libraries in Nigeria. *Journal of Library & Information Services in Distance Learning*, 15(1-2), 30-40. <https://doi.org/10.1080/1533290X.2016.1156597>
 27. Smith, K. (2020). Licensing and access: How copyright and contracts constrain library services. *College & Research Libraries News*, 81(9), 436-440
 28. Thorpe, C., & Gunton, L. (2022). Assessing the United Nation's Sustainable Development Goals in academic libraries. *Journal of Librarianship and Information Science*, 54(2), 208-215. <https://doi.org/10.1177/09610006211005528>

