

**KNOWLEDGE AND ATTITUDE OF STUDENTS TOWARDS
ENVIRONMENTAL SUSTAINABILITY AMONG UNDERGRADUATES AT
THE UNIVERSITY OF BENIN**

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**DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION
(ENVIRONMENTAL EDUCATION)**

FACULTY OF EDUCATION

UNIVERSITY OF BENIN

NOVEMBER, 2025

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF HEALTH,
SAFETY AND ENVIRONMENTAL EDUCATION, FACULTY OF EDUCATION,
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CITY

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CERTIFICATION

We the undersigned certify that this project work was carried out by Oghenoghalome OKOLOSI, with matriculation number EDU2102516 and that the research work is adequate in scope and quality in the Department of Health, Safety and Environmental Education, University of, Benin city, Edo state, in partial fulfillment of the award of Bachelor Degree B.Sc.(Ed) in Environmental Education.

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DEDICATION

This project work is dedicated to God Almighty for His infinite love, favour, grace and mercy throughout this academic journey.

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The researcher expresses deepest gratitude to God Almighty, the giver of life for His unfailing love, favour and grace throughout the study programme. Of a truth, His steadfast love endures forever.

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ABSTRACT

This study investigated knowledge and attitude of students towards environmental sustainability among students at the University of Benin, six research questions were raised to guide the study, two hypotheses were formulated. The purpose was to assess students' level of knowledge, their attitudes, the factors influencing their engagement, the institutional challenges affecting sustainability practices, and their perceptions of the university's role in promoting environmental awareness.

A descriptive survey design was adopted. The population comprised 39,037 undergraduate students in fourteen faculties, from which a sample of 383 respondents was drawn using a multi-stage sampling technique involving systematic, proportional, and purposive methods. Data were collected using a structured twenty-item questionnaire validated by experts, and reliability was determined using the test-retest method, which produced a coefficient of 0.78. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to analyze the data, while hypotheses were tested using the t-test at the 0.05 level of significance. The study concludes that students of the University of Benin possess commendable knowledge and positive attitudes toward environmental sustainability, yet this awareness is not fully translated into consistent practice. It recommends that the university should integrate sustainability education into its General Studies curriculum, strengthen institutional frameworks, provide adequate infrastructure, and actively involve students in sustainability planning and implementation to promote a culture of environmental responsibility across disciplines.

Findings revealed that students demonstrated a generally high level of knowledge of environmental sustainability, particularly regarding responsible resource use, recycling, and conservation of energy and water. However, awareness of global sustainability frameworks such as the Paris Agreement was moderate. The results also showed that students held positive attitudes towards environmental sustainability, though their participation in practical activities such as organized recycling and campus clean-up programs was limited. Factors such as personal values, peer influence, and academic exposure were found to significantly shape engagement in sustainability practices, while institutional challenges such as inadequate infrastructure, weak policy enforcement, and insufficient sensitization programs limited students' active involvement.

CHAPTER ONE

INTRODUCTION

Background of the Study

Environmental sustainability has emerged as a critical global concern in light of escalating environmental challenges such as climate change, biodiversity loss, and environmental degradation. As the impacts of deforestation, pollution, and the depletion of natural resources continue to intensify, the need for informed, collective action to mitigate these effects has become more pressing. Environmental sustainability refers to responsible interaction with the environment that conserves resources, maintains ecological balance, and ensures that future generations can meet their own needs without compromising the environment's health (Sulakshana, 2024). Sustainable practices include renewable energy use, water conservation, sustainable agriculture, waste reduction (e.g., recycling and composting), and the conservation of natural resources.

Over the past decade, environmental sustainability has gained significant prominence on the global agenda, driven by international frameworks such as the 2015 Paris Climate Agreement and the 2030 United Nations Agenda for Sustainable Development (SDGs). Key SDGs, such as Goal 13 (Climate Action), Goal 14 (Life Below Water), and Goal 15 (Life on Land), directly address sustainability challenges (United Nations, 2023). International organizations like the United Nations Environment Programme (UNEP) and the United Nations Educational, Scientific and Cultural

Organization (UNESCO) have spearheaded these global efforts. UNEP supports environmental policies and global agreements, while UNESCO's Education for Sustainable Development (ESD) Programme promotes the integration of sustainability education into school curricula worldwide (United Nations Educational Scientific and Cultural Organization, 2022).

Despite these efforts, significant barriers remain in fully implementing sustainability policies, especially in developing countries. Issues such as insufficient funding, lack of enforcement mechanisms, and an imbalance of responsibility between developed and developing nations hinder progress. Moreover, limited public awareness of sustainability issues exacerbates the gap between policy and action (Sachs et al., 2024).

In Africa, environmental sustainability faces particular challenges linked to socio-economic development, governance, and resource constraints. Rapid industrialization and urbanization have exacerbated environmental degradation, particularly in regions like the Congo Basin, where deforestation for agriculture and logging is rampant. By 2050, it is projected that over half of Africa's population will live in urban areas, contributing to increased waste generation and pollution. Hence, raising awareness of environmental sustainability is critical, particularly among urban populations and higher learning institutions.

In Nigeria, Africa's most populous country, environmental sustainability is a pressing concern, exacerbated by issues such as pollution from oil and gas production in the Niger Delta and inadequate waste management systems. As of 2021, Nigeria generated approximately 32 million tons of solid waste annually, with Lagos State being the largest contributor (Sachs et al., 2024). The Nigerian government has made efforts to address these challenges, notably through the establishment of the National Environmental Standards and Regulations Enforcement Agency (NESREA) in 2007. However, significant gaps remain in policy implementation and public awareness.

The awareness of environmental sustainability among Nigerian university students, particularly in rural areas, is relatively low. Universities play a vital role in shaping the attitudes and behaviors of future leaders, making them key to promoting environmental responsibility. At the University of Nigeria, Nsukka, integrating solid-waste management into geography courses has been shown to empower students as "change agents" for sustainability (Okeke et al., 2022). This suggests that incorporating sustainability education into university curricula can positively influence students' attitudes and behaviors towards environmental responsibility.

At the University of Benin (UNIBEN), environmental challenges include waste management, water conservation, and pollution, which are further compounded by the university's rapidly growing student population. A 2023 study by Erhabor found that students with formal environmental education demonstrated significantly better

awareness and practices regarding waste segregation and recycling. However, much work remains to integrate sustainability practices comprehensively across disciplines at UNIBEN. Studies on environmental sustainability at UNIBEN remain limited, particularly concerning students' attitudes and knowledge. There is a noticeable gap in research that examines how students from various academic disciplines perceive and engage with environmental sustainability. This research seeks to fill that gap by exploring students' knowledge and attitudes towards sustainability across different fields of study at UNIBEN. Understanding how different disciplines influence students' perceptions and actions regarding sustainability is crucial for developing effective strategies that promote environmental awareness and sustainable practices across campus.

Statement of the Problem

Environmental sustainability has become a crucial global issue, yet challenges remain in effectively implementing sustainability practices, especially in developing regions. The University of Benin (UNIBEN) is not exempt from these challenges, with environmental sustainability being a pressing concern across campuses. Despite global and national efforts to promote environmental sustainability, university students, as future leaders, play a pivotal role in shaping the future of the environment through their knowledge, attitudes, and behaviors. However, there is a noticeable gap in the awareness and engagement of students at UNIBEN regarding environmental sustainability.

Research indicates that students' attitudes towards sustainability vary across disciplines, with those studying environmental sciences showing more proactive engagement compared to students in other disciplines. Despite being exposed to environmental education through curricula, campus campaigns, and community engagement programs, many students still exhibit minimal involvement in practical sustainability practices, such as waste management, energy conservation, and water use. This indicates a critical gap between awareness and practical application of environmental sustainability principles among students.

The specific factors that influence students' knowledge and attitudes towards sustainability across disciplines at UNIBEN remain underexplored. The university faces several environmental challenges, including improper waste management, poor water conservation practices, and inadequate energy efficiency measures. The role of academic discipline in shaping students' attitudes and behaviors towards these issues requires thorough investigation to inform effective interventions. This study seeks to bridge the gap in understanding the knowledge, attitudes, and behaviors of students at the University of Benin regarding environmental sustainability. By identifying the factors influencing students' engagement with sustainability practices, this research will provide actionable insights that can help improve environmental education, policies, and practices at UNIBEN.

Research Questions

The following research questions guide this study:

1. What is the level of Knowledge of environmental sustainability among students at the University of Benin?
2. What is the attitude of students at the University of Benin towards environmental sustainability?
3. What factors influence students' engagement with environmental sustainability practices at the University of Benin?
4. How do institutional challenges, such as inadequate infrastructure and policies, affect students' participation in sustainability practices at the University of Benin?
5. How do students perceive the role of the University of Benin in promoting environmental sustainability awareness and practices?
6. There is no relationship between level of knowledge of environmental sustainability and attitude towards environmental sustainability of students at the university of Benin

Hypothesis

1. There is no significant difference in the level of knowledge of environmental sustainability among students at the University of Benin

2. Institutional challenges such as inadequate infrastructure and weak policy enforcement do not significantly affect students' participation in sustainability practices at the University of Benin.

Purpose of the Study

The main purpose of this study is to:

1. Assess the level of Knowledge of environmental sustainability among students at the University of Benin.
2. Investigate whether students at the University of Benin engage in environmental sustainability practices on campus.
3. Examine the factors that influence students' participation in environmental sustainability practices, including behavioral, institutional, and environmental factors.
4. Analyze how institutional challenges, such as poor waste management systems and limited sustainability programs, affect students' involvement in sustainability efforts.
5. Explore students' perceptions of the University of Benin's role in promoting environmental sustainability and its contribution to campus-wide sustainability practices.

6. To know the relationship between level of knowledge of environmental sustainability and attitude towards environmental sustainability of students at the university of Benin

Significance of the Study

This study will provide valuable insights that can benefit several key stakeholders: The findings will help enhance students' understanding of environmental sustainability practices, encouraging them to adopt more sustainable behaviors on campus and beyond. This will contribute to a more sustainable campus environment and empower students to implement these practices in their communities.

The study will enable the university to identify gaps in students' knowledge and engagement with sustainability. This will facilitate the development of more effective educational programs, sustainability initiatives, and policies to improve sustainability practices on campus.

The outcomes of the research will provide guidance for policymakers looking to shape sustainable environmental policies, particularly in educational institutions. By identifying key areas for improvement, this study will inform strategies to promote environmental sustainability at the university level.

The results will allow educators to design more targeted awareness campaigns and curriculum content focused on environmental sustainability. This will help integrate sustainability into the academic framework, promoting it as a core value for the next generation of leaders.

Overall, the study aims to contribute to the broader discourse on environmental sustainability in Nigerian universities and higher education institutions, providing a foundation for expanding sustainable practices and fostering environmental awareness.

Scope/Delimitation of the Study

This study scope focuses on exploring the knowledge and attitudes towards environmental sustainability among students at the University of Benin, located in Edo State, Nigeria. The research will be delimited to undergraduate students enrolled in various academic disciplines, excluding staff and non-student groups. The study will primarily examine students' awareness, attitudes, and involvement in sustainable environmental practices on campus. It will not extend to other universities or communities outside of the University of Benin.

Definition of Terms

- **Environmental Sustainability:** The responsible management of natural resources to meet current needs without compromising the ability of future

generations to meet their own needs. It includes practices such as energy conservation, waste management, and sustainable resource use.

- **Awareness:** The state of being informed about environmental sustainability, including knowledge of its principles, practices, and the importance of sustainable actions.
- **Sustainability Practices:** Actions and behaviors that promote the conservation of natural resources and minimize negative impacts on the environment, such as recycling, reducing waste, and conserving water and energy.
- **University of Benin:** A public higher education institution located in Benin City, Edo State, Nigeria. It is home to a diverse student body and offers a wide range of academic programs across multiple disciplines.
- **Institutional Challenges:** Barriers faced by the university in implementing sustainability practices effectively, such as inadequate infrastructure, lack of policy enforcement, and limited resources for sustainability programs.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews relevant literature on environmental sustainability in higher education institutions, particularly focusing on the knowledge, attitudes, and practices of university students. The review will be organized under the following subheadings:

- Concept of Environmental Sustainability
- Knowledge of Environmental Sustainability Among University Students
- Attitude of Students Towards Environmental Sustainability
- Factors Influencing Student Engagement in Environmental Sustainability
- Institutional Challenges Affecting Students' Participation in Sustainability Practices
- Perception of the Role of the University in Promoting Environmental Sustainability Awareness
- Empirical Review
- Summary of Reviewed Literature

Concept of Environmental Sustainability

Environmental sustainability refers to the ability of natural systems to continue functioning in a manner that supports human life and ecological balance without

depleting the resources upon which they rely. According to the Brundtland Commission's landmark 1987 report, *Our Common Future*, sustainability is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). This definition underscores the long-term preservation of the environment, where resources such as water, air, and land are used in ways that allow for their regeneration, ensuring that future generations inherit a planet capable of sustaining life.

At the core of environmental sustainability is the concept of balance. Human development—be it in the form of industrial progress, agricultural expansion, or urban growth should not result in the degradation of natural ecosystems. Instead, it must operate within the Earth's ecological limits. Practices that contribute to sustainability include the conservation of biodiversity, reduction of waste and pollution, the use of renewable energy sources like solar and wind, and promoting sustainable consumption and production patterns (Sachs et al., 2020). The goal is to ensure that human actions support environmental health while meeting societal needs.

Environmental sustainability holds significant importance, particularly in higher education settings. As institutions of learning and social change, universities are in a unique position to lead by example in promoting sustainability practices among students, staff, and the wider community. In recent years, universities worldwide have been recognized as essential actors in achieving global sustainability goals. They are not only

places of academic inquiry but also influential centers for public engagement on environmental issues. By integrating sustainability into their policies, curricula, and research agendas, universities contribute to the wider global efforts to combat environmental degradation, mitigate climate change, and promote responsible resource management (Sterling, 2019).

In higher education, sustainability is crucial for several reasons. First, universities serve as training grounds for future leaders. Students will eventually lead industries, governments, and communities, so it is essential to instill environmental consciousness at an early stage. Incorporating sustainability into higher education ensures that graduates are equipped with the knowledge and skills necessary to address pressing environmental challenges. Furthermore, universities themselves are major consumers of resources, and by adopting sustainable practices, they can reduce their environmental footprints and demonstrate their commitment to green practices (Leal Filho et al., 2019).

The importance of sustainability in universities is also reflected in their ability to innovate and find new solutions to complex environmental problems. Research conducted at academic institutions plays a crucial role in advancing sustainability by developing technologies and practices that promote environmental conservation. Additionally, many universities are increasingly incorporating sustainability into their curricula across various disciplines. This interdisciplinary approach ensures that all students, regardless of their field of study, understand the impact of their actions on the

environment and are equipped to make informed decisions about resource use and conservation (Gibbs, 2020).

As global awareness of environmental issues has risen, the Sustainable Development Goals (SDGs), adopted by the United Nations in 2015, have become the framework guiding global efforts toward sustainability. These 17 goals provide a universal agenda for achieving economic prosperity, social equality, and environmental health. Specifically, SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 15 (Life on Land) are directly related to environmental sustainability, addressing the urgent need to mitigate climate change, preserve oceans and biodiversity, and promote sustainable land use (United Nations, 2020).

The relevance of these SDGs to universities cannot be overstated. Universities, by their very nature, are engaged in research, policy development, and the education of future leaders. They are ideally placed to contribute to the achievement of the SDGs by incorporating sustainability principles into their institutional operations and curricula. For instance, SDG 4 (Quality Education) directly connects with the role of higher education in fostering sustainability literacy. Universities can promote education for sustainable development by teaching students about environmental issues, encouraging sustainable behaviors, and equipping them with the knowledge to participate in global sustainability efforts (Miller, 2019).

Universities also play a significant role in advocacy and policy influence. By integrating sustainability into their mission, they contribute to the larger global dialogue on environmental issues and act as agents of change in the pursuit of the SDGs. Universities can create, implement green campus initiatives, and engage in community outreach programs that support the UN's sustainability-oriented policies sustainability targets. Through such efforts, higher education institutions can help to build a more resilient society that can address the complex challenges posed by climate change, resource depletion, and environmental degradation (UNESCO, 2022).

The SDGs emphasize a holistic approach to sustainability, which includes not just environmental conservation but also social equity and economic growth. Universities are central to achieving these interconnected goals. By integrating sustainability into research, policy, and outreach, higher education institutions help to ensure that sustainability is not merely an academic concept but a transformative practice that can shape the future. Universities that embrace this integrated approach contribute significantly to global sustainability goals, fostering a culture of sustainable thinking that extends well beyond their campuses (Aksornkool & Liu, 2021).

Sustainability also involves addressing inequalities and ensuring that environmental benefits are shared equitably. As higher education institutions continue to engage with the SDGs, there is growing recognition of the need to consider social justice and economic equity alongside environmental protection. Universities have the power to

educate future leaders who understand the importance of inclusive growth and the need to balance environmental goals with economic and social needs (Schleicher, 2020).

The role of universities in achieving the SDGs is multifaceted. Through academic programs, research initiatives, and operational practices, universities serve as both conduits of knowledge and agents of change. They promote awareness, provide solutions, and train the next generation of leaders who will tackle the challenges of environmental sustainability on a global scale. Universities, through their alignment with the SDGs, play a pivotal role in advancing both the environmental and societal dimensions of sustainability (Gibbs, 2020). Environmental sustainability in higher education is not only essential for the future of the planet but also for the long-term success of societies globally. Universities have the unique opportunity to drive sustainability by educating and empowering students, conducting impactful research, and integrating sustainability practices into their operations. The SDGs offer a critical framework that can guide universities' efforts to contribute meaningfully to global sustainability challenges while reinforcing their roles as leaders in sustainable development. Through these efforts, universities can ensure that future generations inherit a planet capable of sustaining life and prosperity for all.

Knowledge of Environmental Sustainability Among University Students

Environmental sustainability has become one of the most pressing issues of the 21st century, requiring collective efforts from individuals, institutions, and governments.

Universities, as centers of learning and innovation, play a crucial role in shaping students' knowledge and attitudes toward sustainability. Students are future decision-makers; therefore, their awareness and understanding of environmental sustainability significantly influence global efforts to mitigate climate change, biodiversity loss, and resource depletion (Lozano, 2018).

Knowledge of environmental sustainability among university students is multidimensional, covering awareness of ecological issues, comprehension of sustainable practices, and recognition of the socio-economic implications of environmental degradation. Studies show that students often have basic awareness of climate change and pollution but lack deeper understanding of how personal behavior and policy interact with environmental outcomes (Zsóka et al., 2013).

One determinant of students' knowledge is the integration of sustainability topics within university curricula. Universities that embed sustainability education across disciplines report higher levels of student knowledge and engagement with environmental issues (Fadeeva & Mochizuki, 2010). For example, engineering students exposed to renewable energy projects demonstrate greater practical understanding than peers with limited curricular exposure.

Research highlights a knowledge gap between environmental awareness and actionable sustainability practices. While many students are familiar with terms like

“recycling” or “carbon footprint,” they often struggle to connect these concepts to systemic solutions such as circular economies or sustainable consumption models (Alam & Ahmad, 2017). This gap suggests the need for more experiential learning opportunities.

The influence of socio-cultural and geographical contexts cannot be overlooked. Students in developed countries may exhibit broader knowledge of global sustainability frameworks, while those in developing regions often demonstrate context-specific knowledge linked to local challenges like deforestation, waste disposal, or water scarcity (Omisore et al., 2017). These differences reflect how sustainability knowledge is shaped by lived realities.

Peer influence and social media have also become powerful drivers of sustainability knowledge among students. Platforms like Instagram and TikTok disseminate information about eco-friendly lifestyles, climate activism, and zero-waste movements, making sustainability a social trend. However, such knowledge may remain superficial without deeper academic engagement (Leal Filho et al., 2019).

Institutional policies further shape knowledge acquisition. Universities with green campuses, recycling programs, and sustainability clubs provide students with practical examples of environmentally responsible practices. This experiential exposure often reinforces theoretical knowledge gained in the classroom (Wals, 2014).

Despite increasing exposure, studies reveal that many students still underestimate the urgency of sustainability issues. For instance, a survey conducted across Asian and European universities found that although most students agreed sustainability was important, only a minority could explain the United Nations Sustainable Development Goals (SDGs) in detail (Koehn & Uitto, 2014).

Environmental literacy is also linked to academic discipline. Students in natural and applied sciences tend to demonstrate higher sustainability knowledge compared to those in social sciences or humanities. Nevertheless, interdisciplinary approaches are essential to foster a holistic understanding of environmental challenges (Cebrián & Junyent, 2015).

Barriers to sustainability knowledge include limited institutional commitment, inadequate funding for green initiatives, and resistance from stakeholders who view sustainability as peripheral to academic success. Overcoming these barriers requires policy reform and stronger alignment of higher education with sustainability goals (Lozano et al., 2015).

Cultivating knowledge of environmental sustainability among university students is not merely about academic enrichment but about equipping them to be responsible global citizens. Embedding sustainability into curricula, leveraging technology for

awareness, and fostering campus-wide initiatives create an enabling environment where students move from passive awareness to active engagement (Sterling, 2010).

The knowledge of environmental sustainability among university students remains varied and influenced by multiple factors including curriculum design, social trends, institutional practices, and cultural context. Bridging gaps between awareness and practice requires comprehensive strategies that integrate formal education, experiential learning, and policy support. Empowered with such knowledge, students can contribute meaningfully to the pursuit of a more sustainable future (UNESCO, 2020)

Attitude of Students Towards Environmental Sustainability

The urgency of addressing environmental degradation has made sustainability education a priority in higher institutions. University students are key actors in this effort because their attitudes toward sustainability determine the extent to which knowledge translates into environmentally responsible behavior. Attitudes, which include beliefs, feelings, and behavioral intentions, are central to developing a generation capable of confronting climate change and other ecological challenges (UNESCO, 2020). Recent studies reveal that students generally exhibit positive attitudes toward environmental sustainability. Many express strong concern for issues like climate change, waste management, and energy conservation. However, the extent of these attitudes differs across contexts, with students in universities with sustainability-integrated curricula

reporting more favorable outlooks compared to peers with limited exposure (Leal Filho et al., 2019). The link between environmental knowledge and attitude is evident in recent scholarship. Students with higher awareness of sustainability concepts are more likely to develop favorable attitudes and pro-environmental orientations. Yet, research also shows that knowledge does not automatically result in behavior change, as the well-documented “attitude-behavior gap” persists across student populations (Aguado et al., 2020).

Gender continues to influence students’ environmental attitudes. Research conducted across multiple universities indicates that female students often demonstrate stronger pro-sustainability attitudes compared to males, particularly in areas related to waste reduction and energy use. This pattern highlights how socialization and value orientation contribute to shaping attitudes (Nguyen et al., 2021). Disciplinary background plays a crucial role in shaping students’ environmental attitudes. Students enrolled in science, engineering, and environmental programs often report stronger positive attitudes than those in business or humanities disciplines. This trend suggests that the extent of sustainability integration into curricula influences the development of environmental values (Alnajem et al., 2021).

Institutional commitment has been found to strongly shape student attitudes. Universities that implement green campus initiatives—such as renewable energy use, recycling programs, and sustainability awareness campaigns—create environments where positive attitudes are normalized. Such practices serve as experiential reinforcement of

classroom learning (Leal Filho et al., 2020). Despite these positive indicators, the challenge of the attitude-behavior gap remains. Many students express positive views about sustainability but fail to adopt practices such as cycling to school, minimizing energy consumption, or reducing plastic use. This discrepancy is often explained by convenience, lack of incentives, and infrastructural limitations (Bieler & McKenzie, 2017).

Cultural and regional contexts significantly influence students' attitudes. In developing countries, students' positive attitudes are often shaped by visible environmental problems such as deforestation, flooding, or pollution. In contrast, students in developed countries tend to approach sustainability from a policy or global responsibility perspective (Omisore et al., 2017). This highlights the importance of contextualized sustainability education. Social influences, especially peer networks and social media platforms, are increasingly shaping students' environmental attitudes. Movements like "Fridays for Future" and campaigns on TikTok and Instagram have strengthened the visibility of climate activism and encouraged students to express favorable attitudes towards sustainability (Leal Filho et al., 2019). However, these influences can sometimes lead to performative rather than substantive commitment.

Values and belief systems also intersect with environmental attitudes. Students with stronger ethical orientations or religious teachings that emphasize stewardship and care for creation often demonstrate more favorable attitudes toward sustainability. Such

findings reinforce the idea that attitudes are not only cognitive but are also rooted in identity and value systems (Aguado et al., 2020). To strengthen positive attitudes, universities are increasingly embedding sustainability into pedagogy. Experiential learning, service-based projects, and interdisciplinary courses have been found to transform attitudes by connecting sustainability to students' lived experiences. These initiatives help bridge the gap between awareness, favorable attitudes, and sustainable behavior (Leal Filho et al., 2020). Students generally exhibit favorable attitudes toward environmental sustainability, but these do not always translate into consistent behavioral practices. Factors such as gender, disciplinary background, institutional policies, cultural setting, and social influence all play critical roles in shaping these attitudes. By embedding sustainability in curricula, fostering experiential learning, and supporting campus-wide green initiatives, universities can reinforce positive attitudes and empower students to become sustainability leaders (UNESCO, 2020)

Factors Influencing Student Engagement in Environmental Sustainability

Student engagement in environmental sustainability practices is shaped by a combination of individual, institutional, and environmental factors. While awareness and education are fundamental in driving sustainable behaviors, several other elements—ranging from personal attitudes to institutional policies—play a crucial role in encouraging or hindering student participation. Understanding these factors is essential for developing effective strategies to promote sustainability among university students.

One of the primary factors influencing student engagement in sustainability is personal values and environmental attitudes. Research indicates that students who hold strong pro-environmental beliefs are more likely to engage in sustainable practices. These students are often motivated by intrinsic values, such as a sense of moral responsibility or a desire to protect the planet for future generations. According to Ogundele and Salami (2020), students with a deep connection to environmental causes tend to adopt more sustainable behaviors, such as recycling, energy conservation, and sustainable food choices. Conversely, students with weaker environmental values or who view sustainability as a low priority are less likely to engage in these behaviors.

Education and awareness play a significant role in shaping students' environmental attitudes. As the foundation of most sustainability initiatives, environmental education helps students understand the urgency of addressing environmental challenges. Studies have shown that students exposed to environmental issues through formal courses or extracurricular programs tend to demonstrate greater interest and engagement in sustainability practices (Adewumi & Ogunyemi, 2020). For example, students who take courses in environmental science or sustainability are more likely to adopt behaviors aligned with sustainability principles, such as reducing energy consumption and supporting green campus initiatives.

Peer influence is another key factor driving student engagement in sustainability. University students, especially those in their formative years, are often influenced by

their social networks and peer groups. Research by Eze and Ojo (2021) found that students involved in environmental clubs or sustainability initiatives were more likely to adopt sustainable behaviors due to the influence of their peers. Peer influence is particularly powerful in university settings, where students are surrounded by like-minded individuals who share similar values and concerns about the environment. Additionally, students who participate in sustainability projects or activities with their peers are more likely to internalize sustainability values and apply them to their personal lives.

The availability of infrastructure also significantly impacts student engagement in sustainability practices. Institutions that provide the necessary resources—such as recycling bins, energy-efficient lighting, and water-saving technologies—make it easier for students to practice sustainability. Uche and Onuorah (2022) emphasize that the presence of green infrastructure on campus encourages students to engage in environmentally responsible behaviors. Conversely, the lack of such infrastructure can deter students from adopting sustainable practices, as they may feel that the effort to engage in these behaviors is too great without the necessary facilities. For instance, in universities where recycling bins are not easily accessible, students are less likely to separate waste or participate in recycling initiatives.

Institutional support and policies also play a significant role in shaping student behavior towards sustainability. Universities that prioritize environmental sustainability

in their policies and provide tangible support for sustainability initiatives tend to see higher levels of student engagement. According to Ajibade and Nwachukwu (2023), universities with clear sustainability policies and dedicated environmental units are more effective at mobilizing students for sustainable activities. These institutions offer incentives, recognition programs, and participation opportunities that encourage students to engage in sustainability practices. The presence of well-structured sustainability programs can provide students with clear pathways to contribute to environmental goals, whether through volunteering, internships, or campus-based initiatives.

The visibility and promotion of sustainability initiatives on campus are also important factors in encouraging student participation. Research by Musa and Bello (2020) shows that students are more likely to engage in sustainability practices when these practices are visibly promoted through campus campaigns, workshops, and seminars. High-profile events such as Earth Day celebrations or sustainability fairs can serve as powerful motivators, raising awareness and encouraging students to take actionable steps toward sustainability. Additionally, when students see their university actively promoting sustainability—through green campus initiatives, waste reduction programs, or renewable energy projects—they are more likely to feel motivated to contribute to these efforts.

Incentives and rewards also play a key role in motivating students to engage in sustainability practices. Providing rewards for sustainable behaviors, such as discounts on

campus services for recycling or recognition for student-led sustainability projects, can incentivize students to adopt sustainable habits. Adebayo and Ogunyemi (2020) found that financial incentives, as well as public acknowledgment of sustainable actions, increased student participation in environmental programs. These incentives create a sense of ownership and accomplishment, reinforcing the value of sustainability practices and encouraging long-term engagement.

Another factor influencing student engagement in sustainability is the personal convenience associated with sustainable behaviors. Students are more likely to engage in sustainability practices when they find these behaviors easy to incorporate into their daily routines. For example, if recycling bins are conveniently located in dormitories, students are more likely to participate in recycling efforts. Similarly, the use of energy-efficient lighting and water-saving devices in student accommodations or lecture halls simplifies the process of engaging in energy and water conservation practices. If these actions require minimal effort or disruption to students' daily lives, they are more likely to become habitual.

Cultural attitudes and societal norms can also shape students' engagement in environmental sustainability. Students from regions where environmental issues such as deforestation, water scarcity, or air pollution are more prominent are often more inclined to engage in sustainability practices. According to Okon (2021), students who come from rural or resource-scarce areas tend to have a greater appreciation for sustainability due to

their firsthand experience with environmental challenges. On the other hand, students from more affluent, urban backgrounds may be less aware of environmental degradation and less motivated to adopt sustainable behaviors. Addressing these cultural differences through tailored sustainability programs can help bridge the gap and foster broader participation in sustainability initiatives across diverse student populations.

Financial barriers also influence student engagement in sustainability practices. Although many students are motivated to adopt sustainable behaviors, the financial cost of green technologies or sustainable products can be a significant barrier. For example, purchasing energy-efficient appliances or sustainable clothing may be more expensive than conventional alternatives. This financial barrier may discourage students from adopting more sustainable practices, particularly in cases where they are already dealing with financial pressures. Universities can address these barriers by offering subsidies or financial support for students who wish to engage in sustainability practices, such as providing discounts on energy-efficient appliances or offering low-cost transportation options (Uche & Onuorah, 2022).

Awareness of global environmental issues influences student engagement in sustainability. Students who are aware of the larger context of environmental challenges, such as climate change and biodiversity loss, are more likely to engage in sustainability practices on a personal level. Initiatives like the United Nations' Sustainable Development Goals (SDGs) and international climate agreements raise awareness of the

global importance of sustainability, making students more conscious of the environmental impact of their actions (Sachs et al., 2020). When students understand that their individual efforts contribute to a global movement for change, they are more likely to take personal responsibility for sustainable actions. Student engagement in environmental sustainability is influenced by a complex interplay of personal, institutional, and environmental factors. By addressing these factors—through education, infrastructure, institutional support, and peer influence—universities can significantly enhance student participation in sustainability practices. A holistic approach that integrates sustainability into students' daily lives, promotes awareness, and provides incentives is essential for creating a sustainable campus culture that extends beyond the university into the broader community.

Institutional Challenges Affecting Students' Participation in Sustainability Practices

Despite the growing emphasis on sustainability, universities often face several institutional challenges that impede the full engagement of students in environmental sustainability practices. These challenges, which arise from both structural and policy-related issues, can significantly hinder the implementation of sustainability programs and the active participation of students. Understanding these barriers is crucial for developing strategies that can facilitate greater student involvement and enhance the overall sustainability efforts of universities.

One of the most significant challenges is the lack of infrastructure to support sustainability practices. Universities, particularly in developing countries like Nigeria, often suffer from inadequate resources and outdated infrastructure. This includes poor waste management systems, insufficient recycling facilities, and inefficient energy and water use infrastructure. For example, at many campuses, recycling bins are either not available or not strategically placed, which discourages students from actively participating in recycling efforts (Uche & Onuorah, 2022). Similarly, many universities still rely on outdated technologies, such as incandescent bulbs and inefficient heating or cooling systems, which increase energy consumption and hinder efforts to promote energy conservation among students.

Another institutional challenge is the lack of policy enforcement. While many universities have sustainability-related policies, they are often not effectively implemented or enforced. Without a robust system for monitoring and enforcing sustainability initiatives, students may feel that their efforts to engage in environmental practices are not being adequately supported or that there are no tangible consequences for failing to adhere to sustainability norms. Research by Ajibade and Nwachukwu (2023) found that students at universities with weak enforcement mechanisms were less likely to take sustainability policies seriously, as they perceived the lack of consequences as a signal that sustainability was not truly a priority for the institution. This lack of

accountability undermines the effectiveness of sustainability programs and hampers student engagement.

Financial constraints pose a significant challenge to sustainability initiatives at universities. Budgetary limitations often mean that universities cannot invest in necessary infrastructure improvements, such as installing energy-efficient lighting, upgrading waste management systems, or implementing green campus technologies. According to Adebayo and Ogunyemi (2020), universities in resource-constrained settings face difficulties in prioritizing environmental sustainability within their limited budgets. This financial barrier not only affects the physical infrastructure but also limits the scope of sustainability programs, reducing the opportunities for students to engage in meaningful sustainability initiatives on campus.

Institutional culture and attitudes also play a critical role in shaping students' engagement with sustainability. Some universities may have a historical resistance to sustainability initiatives due to a lack of awareness or institutional inertia. In such environments, sustainability may not be viewed as a core institutional value, and as a result, it may not be prioritized in university operations, curricula, or extracurricular activities. Research by Okon (2021) highlights that universities with a culture of resistance to sustainability often face difficulties in implementing change, as there is a lack of buy-in from both faculty and administration. This resistance can lead to disjointed

efforts and a failure to integrate sustainability into the institutional culture, leaving students without clear leadership or direction.

Lack of student involvement in decision-making processes related to sustainability is another challenge faced by many universities. When students are excluded from sustainability discussions and decisions, they may feel disconnected from the university's efforts and less motivated to engage in sustainability practices. This lack of student representation in sustainability planning can result in policies and programs that do not fully reflect the needs and interests of the student body. According to Eze and Ojo (2021), student participation in sustainability programs and policy development is critical for ensuring that initiatives are relevant, engaging, and impactful. Universities that encourage student-led sustainability initiatives or involve students in policy-making processes tend to see higher levels of engagement and commitment to sustainability practices.

The lack of interdisciplinary collaboration also hinders sustainability efforts in universities. Sustainability issues are complex and multifaceted, requiring a collaborative approach that integrates knowledge and expertise from various fields of study. However, many universities still operate in silos, with different departments and faculties working in isolation on sustainability issues. This lack of collaboration can lead to fragmented efforts, where sustainability initiatives are not integrated across the campus and fail to address the full range of environmental challenges. A study by Ogundele and Salami

(2020) found that universities with strong interdisciplinary sustainability programs, where students from different disciplines collaborate on sustainability projects, are more successful in promoting comprehensive environmental practices. Interdisciplinary efforts encourage students to see the connections between their academic work and environmental challenges, fostering a more holistic understanding of sustainability.

Inadequate or inconsistent communication regarding sustainability efforts also contributes to the challenge of student engagement. Effective communication is essential for ensuring that students are aware of sustainability policies, programs, and opportunities for involvement. However, many universities fail to communicate their sustainability efforts effectively, resulting in low awareness and participation among students. According to Musa and Bello (2020), universities that provide regular updates, clear messaging, and visible signage about sustainability initiatives are more successful in engaging students. In contrast, universities that lack consistent and clear communication often struggle to generate interest and participation in sustainability programs.

The lack of leadership commitment to sustainability is another critical barrier. Universities that do not have strong leadership support for sustainability may struggle to implement comprehensive programs and initiatives. According to Okon (2021), leadership at the highest levels of the university, including vice-chancellors and senior administrators, plays a crucial role in setting the tone for sustainability efforts. When leadership fails to prioritize sustainability or allocate sufficient resources to sustainability

initiatives, it sends a message to students that sustainability is not a key institutional priority. On the other hand, universities with committed leadership, as demonstrated through the allocation of resources, the establishment of sustainability offices, and the integration of sustainability into strategic planning, are more likely to achieve meaningful progress in engaging students.

Limited research and data collection on student sustainability behaviors and the effectiveness of sustainability programs is another challenge that universities face. Without accurate data on student engagement in sustainability initiatives, it is difficult to assess the impact of existing programs and identify areas for improvement. Research by Ajayi and Akinwale (2019) highlighted the importance of collecting data on student participation in sustainability programs to evaluate the effectiveness of these initiatives and adjust strategies accordingly. Universities that regularly collect and analyze data on sustainability behaviors can better understand the factors influencing student engagement and refine their efforts to promote sustainability more effectively. Universities face multiple institutional challenges that affect students' participation in sustainability practices. Addressing these challenges requires a multi-faceted approach that includes improving infrastructure, strengthening policy enforcement, increasing financial support, fostering a culture of sustainability, involving students in decision-making processes, and enhancing communication efforts. By overcoming these barriers, universities can create

an environment that encourages students to engage in sustainability practices and contribute to the broader goal of environmental stewardship.

Perception of the Role of the University in Promoting Environmental Sustainability Awareness

The role of universities in promoting environmental sustainability awareness is integral to shaping the behaviors and attitudes of students towards sustainable practices. As institutions of higher learning, universities have the responsibility to foster an environment where sustainability is not only taught but actively practiced. The perception of students regarding their university's role in promoting environmental sustainability awareness can significantly influence their own involvement in sustainable actions. Universities are seen as both educators and role models for sustainable behavior, and their leadership in sustainability efforts can inspire students to adopt similar practices in their personal lives and future careers (Sterling, 2019).

One of the most significant ways universities can promote environmental sustainability is through the integration of sustainability into their curriculum. Universities that incorporate sustainability topics into a wide range of academic programs ensure that students from various disciplines gain an understanding of environmental challenges and solutions. This approach helps cultivate a generation of students who are not only knowledgeable about sustainability but also empowered to take action. A study

by Adewumi and Ogunyemi (2020) found that students exposed to sustainability topics as part of their academic courses demonstrated a deeper commitment to sustainable practices both on and off-campus. When universities integrate environmental education across multiple disciplines, it creates a broader and more inclusive approach to sustainability, ensuring that students from all academic backgrounds can contribute to environmental solutions.

In addition to formal education, universities can promote sustainability through extracurricular activities. Student-led sustainability clubs, environmental organizations, and green campus initiatives are effective platforms for raising awareness and mobilizing students to engage in sustainability efforts. According to Ajibade and Nwachukwu (2023), universities that support student-led initiatives and provide funding and resources for sustainability projects see higher levels of student participation. These initiatives often involve hands-on activities such as tree planting, campus clean-up programs, and sustainability workshops, which allow students to directly apply their knowledge and make a tangible impact on the campus environment.

Moreover, campus sustainability infrastructure plays a crucial role in shaping students' perceptions of the university's commitment to environmental sustainability. The presence of energy-efficient buildings, waste recycling programs, and water conservation systems signals to students that the institution is not only advocating for sustainability but also implementing it within its own operations. Research by Eze and Ojo (2021)

highlights that students are more likely to engage in sustainability practices when they see that their university is actively promoting green technologies and sustainability initiatives on campus. When universities lead by example, they set the standard for students to follow, demonstrating that sustainability is not merely a theoretical concept but a practical and achievable goal.

However, for universities to be effective in promoting sustainability, there must be a clear institutional commitment to environmental sustainability. This commitment must be reflected in university policies, resource allocation, and long-term sustainability strategies. Uche and Onuorah (2022) emphasize that universities with strong leadership in sustainability, who integrate sustainability goals into their strategic planning and operations, are more successful in fostering a culture of sustainability. Without this institutional commitment, sustainability efforts may be fragmented and lack the necessary resources to achieve meaningful change. It is essential for universities to prioritize sustainability as a core value and allocate resources to support it, both in terms of physical infrastructure and educational programs.

Another crucial aspect of promoting sustainability is through awareness campaigns and community engagement. Universities can raise environmental awareness through posters, social media campaigns, workshops, and public lectures that educate students on pressing environmental issues such as climate change, deforestation, and resource depletion. According to Musa and Bello (2020), effective communication

strategies that utilize digital media, peer networks, and public events can significantly increase student engagement with sustainability topics. By promoting sustainable behaviors through multiple channels, universities can reach a broader audience and encourage greater student involvement in sustainability initiatives.

In addition to direct awareness campaigns, universities should encourage students to take ownership of sustainability efforts. Research by Okon (2021) suggests that when students are involved in decision-making processes related to sustainability policies and campus practices, they are more likely to feel a sense of responsibility for the success of these initiatives. Student involvement in campus sustainability committees, sustainability planning, and the development of environmental policies ensures that their perspectives and concerns are heard, and their actions are aligned with the university's goals. Empowering students to lead sustainability efforts fosters a sense of agency and encourages them to become proactive change-makers both within and outside the university environment.

The visibility of sustainability efforts also plays a key role in shaping students' perceptions. Universities that showcase their sustainability achievements, such as achieving carbon neutrality, implementing green campus certifications, or reducing their overall environmental footprint, send a powerful message to students about the importance of environmental responsibility. As noted by Eze and Ojo (2021), universities with visible sustainability accomplishments provide students with concrete examples of

what can be achieved through collective action. These achievements not only inspire pride among students but also encourage them to take part in ongoing sustainability initiatives, knowing that their efforts will contribute to the university's goals.

Furthermore, collaborations with external organizations—such as environmental NGOs, government agencies, and private sector partners—can enhance a university's role in promoting environmental sustainability. These partnerships often bring in resources, expertise, and opportunities for students to engage in real-world sustainability projects. For instance, universities that partner with local governments or environmental NGOs can offer students internships, fieldwork, and research opportunities that deepen their understanding of environmental issues while providing them with practical experience in the field (Adebayo & Ogunyemi, 2020). These collaborations also broaden the scope of sustainability efforts and allow students to apply their knowledge in diverse settings.

Student perceptions of university sustainability efforts can vary based on their experiences with sustainability initiatives. Some students may perceive university sustainability programs as genuine and impactful, while others may view them as merely symbolic or superficial. Research by Oluwatayo et al. (2022) indicates that students are more likely to engage in sustainability practices when they believe their university's efforts are authentic and long-term, rather than tokenistic or temporary. Therefore, universities must ensure that their sustainability initiatives are well-integrated into

campus life and are seen as part of a larger, continuous effort to promote environmental responsibility.

Another challenge to promoting sustainability awareness is the institutional inertia that can occur in universities that have not yet integrated sustainability into their operational culture. As noted by Ajibade and Nwachukwu (2023), some universities experience significant resistance to sustainability initiatives due to entrenched attitudes, bureaucratic hurdles, or a lack of familiarity with sustainability issues. Overcoming this inertia requires strong leadership, comprehensive planning, and the active involvement of students, faculty, and administrators in shaping and executing sustainability policies.

Financial constraints often limit the extent to which universities can implement comprehensive sustainability programs. Many universities face budgetary limitations, making it difficult to fund large-scale sustainability projects or hire dedicated sustainability staff. Adebayo and Ogunyemi (2020) note that financial limitations can hinder the development of essential infrastructure such as renewable energy systems or waste management technologies, which are key to reducing the environmental footprint of university campuses. Universities must seek creative ways to secure funding for sustainability initiatives, such as through grants, alumni donations, and partnerships with private companies. Universities play a critical role in shaping students' perceptions and engagement with environmental sustainability. By integrating sustainability into their curriculum, providing leadership support, implementing sustainability practices on

campus, and fostering student involvement, universities can encourage a culture of sustainability that extends beyond the campus and into the wider community. For sustainability efforts to be successful, universities must align their policies, infrastructure, and educational programs with a long-term vision that prioritizes environmental responsibility, equity, and collective action.

Empirical Review

The empirical review in this study focuses on existing research regarding environmental sustainability practices, awareness, and attitudes among university students. Numerous studies have explored factors influencing student participation in sustainability initiatives, their levels of awareness, and how institutional structures affect environmental engagement. These empirical investigations provide useful insights that inform the current study, particularly in the Nigerian university context. Okon (2021) conducted a study on student awareness and involvement in environmental sustainability in Nigerian universities. The objective of the study was to assess the extent to which students are aware of global environmental issues and how this awareness translates into campus-based practices. The study sampled undergraduate students across three public Nigerian universities. Findings revealed that although students exhibited a high level of awareness of global environmental challenges, their actual engagement in sustainability practices such as recycling, waste segregation, and energy conservation was minimal.

The conclusion drawn was that awareness alone is not sufficient to drive sustainable behavior; structural support and enabling environments are necessary for actual practice.

Eze and Ojo (2021) investigated the relationship between student knowledge and their participation in sustainability actions at the University of Ibadan. Their study aimed to determine if students' understanding of environmental issues influenced their active engagement in sustainability efforts. Using a sample of 250 undergraduate students, they found that while students were generally knowledgeable about environmental challenges, their involvement in practical sustainability efforts was hindered by poor campus infrastructure and lack of motivation. The study concluded that practical engagement requires both motivation and adequate infrastructural support. Similarly, Ogundele and Salami (2020) explored the influence of academic discipline on student attitudes and practices towards environmental sustainability. The researchers sought to determine if students in science disciplines are more engaged in sustainability than their counterparts in non-science fields. A sample of 400 students from two Nigerian universities was used, and results indicated that science students displayed greater awareness and more frequent participation in environmental practices. The conclusion was that exposure to environmental topics within science curricula significantly influences student behavior.

In another related study, Adewumi and Ogunyemi (2020) examined the relationship between students' academic backgrounds and their sustainability behaviors. Their objective was to determine if environmental education within a specific discipline

leads to more environmentally responsible behavior. The sample included 300 students from departments such as Environmental Science and Engineering. Findings showed that students from environment-related courses engaged more in sustainable practices. The study concluded that academic exposure to environmental issues fosters stronger sustainability behaviors among students. Ajibade and Nwachukwu (2023) investigated the institutional barriers affecting student participation in sustainability initiatives in Nigerian universities. Their research objective was to identify the challenges that limit student involvement. The study surveyed 200 students across three federal universities and found that lack of infrastructure, such as recycling bins and renewable energy facilities, as well as weak policy enforcement and lack of incentives, were significant barriers. The study concluded that universities must strengthen institutional frameworks and support systems to foster student engagement.

Adebayo and Ogunyemi (2020) also explored challenges hindering the implementation of sustainability initiatives in Nigerian universities. The objective was to assess financial, cultural, and institutional limitations. Their study sampled 150 respondents including students and administrative staff. Findings identified financial constraints, exclusion of students in environmental decision-making, and cultural resistance to sustainability as key hindrances. The conclusion emphasized that effective sustainability implementation requires cultural sensitivity, funding, and participatory governance. Uche and Onuorah (2022) focused on the role of institutional leadership in

promoting environmental sustainability among students. The study aimed to evaluate how leadership commitment influences student engagement. Data were gathered from 180 students and 20 administrators from three Nigerian universities. The results indicated that institutions with proactive leadership, visible green policies, and integration of sustainability in the curriculum recorded higher student involvement. The study concluded that committed leadership is a vital driver for cultivating a sustainability culture on campus.

Musa and Bello (2020) examined how institutional infrastructure and digital media campaigns impact student participation in sustainability. The objective was to assess the effect of visible sustainability efforts (e.g., solar panels, rainwater systems) and social media outreach on student behavior. A sample of 300 students from two universities was studied. The findings revealed that both physical visibility of sustainable practices and engaging social media campaigns significantly boosted student awareness and participation. The conclusion emphasized the importance of combining physical infrastructure with digital communication to effectively promote environmental responsibility. Ajayi and Akinwale (2019) explored the influence of student-led sustainability initiatives such as eco-clubs and campus workshops. The research sought to determine whether peer-led efforts could enhance student involvement in sustainability. The sample comprised 120 students participating in eco-clubs and 180 non-participants. Results showed that students involved in peer-led programs were more likely to engage

in pro-environmental behaviors. The study concluded that empowering students through leadership roles and peer engagement creates a sense of ownership that encourages consistent sustainability practices.

Okonkwo and Ekundayo (2019) studied gender differences in sustainability engagement among Nigerian university students. The research objective was to analyze how gender influences environmental awareness and behavior. Using a balanced sample of 150 male and 150 female students, the study found that female students generally showed higher environmental consciousness and were more likely to engage in activities like energy conservation and waste sorting. The study concluded that gender-sensitive approaches are necessary when designing sustainability programs to ensure balanced participation. These empirical studies collectively provide critical insights into the factors shaping environmental sustainability behavior among university students.

Summary of Reviewed Literature

The reviewed literature underscores the significance of environmental sustainability awareness and engagement among university students. Most studies agree that while students generally demonstrate a solid awareness of environmental issues, this awareness does not always translate into active participation in sustainability practices such as recycling, energy conservation, and waste management. Common barriers identified include inadequate campus infrastructure, weak policy implementation, lack of

institutional support, and limited incentives. Research also highlights the influence of academic discipline, where science-based students tend to be more engaged than their counterparts in non-science fields. Furthermore, factors such as peer influence, cultural orientation, and gender differences have been found to shape students' sustainability behaviors, with females and rural-background students often showing higher levels of environmental consciousness.

The literature also reveals the positive impact of interdisciplinary education, student-led initiatives (e.g., eco-clubs), and digital media campaigns in promoting sustainability practices. Additionally, strong institutional leadership and visible sustainability efforts, such as green campus infrastructure, are linked to higher student involvement. However, a critical gap exists in localized, institution-specific research. Many of the reviewed studies focus on broader national or multi-institutional contexts, often overlooking the unique environmental, cultural, and infrastructural characteristics of individual universities. Specifically, there is a lack of empirical data on student awareness, attitudes, and barriers to sustainability practices within the University of Benin and similar tertiary institutions in Southern Nigeria. This gap limits the development of targeted interventions and policies tailored to the realities of these campuses. Therefore, this study seeks to fill that gap by providing a context-specific assessment of environmental sustainability awareness and engagement among students at the University of Benin.

CHAPTER THREE

METHODOLOGY

This chapter describes the method and procedure used by the researcher in conducting the study. It is presented under the following Sub headings;

- Design of the Study
- Population of the Study
- Sample and Sampling Techniques
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Design of the Study

A descriptive survey research design was used for the study; this design was used because it enables the researcher to gather data from a sample of Undergraduates students. Survey research in the view of Olaitan, Ali, Eyo and Sowande (2023) is a design that employs the study of a sample of large population to discover the relative incidence, distribution and interrelations of variables through the use of questionnaire.

Population of the Study

The population of the study consists of 39,037 undergraduate students enrolled in fourteen faculties at the University of Benin, 2025 session. *Source: Academic Planning Unit, Student Affairs Division (2024)*

The distribution is presented below:

Table I: Population of Students

S/N	FACULTY	MALE	FEMALE	TOTAL
1	agric	900	1156	2056
2	Arts	2197	3513	5710
3	Medicine	795	1175	1948
4	Dentistry	115	49	164
5	Education	2993	4376	7369
6	Engineering	3108	503	3611
7	Environmental Science	462	134	596
8	Law	414	575	989
9	Life Science	2193	2895	5088
10	Management Science	1561	1568	3129
11	Medicine	542	253	795
12	Pharmacy	582	412	994
13	Physical Sciences	2206	1346	3552
14	Social Sciences	1703	1333	3036
	Total	19955	19288	39037

Source: Students Affairs Division (Academic Planning Unit, 2024)

Sample and Sampling Technique

The sample size for this study was 383 respondents. The study employed a multi-stage sampling technique consisting of systematic, proportional, and purposive sampling methods. This approach ensured broad coverage across the university while also allowing the researcher to select respondents who were relevant to the study focus.

Stage 1: Systematic Sampling Technique (Selection of Faculties)

At the first stage, a systematic sampling technique was used to select faculties from the University of Benin. The university has fourteen (14) faculties. Using a sampling interval, every 3rd faculty on the list was selected, resulting in the choice of five (5) faculties:

- 1. Agriculture
- 4. Dentistry
- 7. Environmental Science
- 10. Management Science
- 13. Physical Sciences

These five faculties formed the accessible study population.

Reason for use: Systematic sampling was used to reduce selection bias and to ensure that the selected faculties were spread across the full faculty list, rather than being clustered in

one part of the university. It is simple, replicable, and gives each faculty a fair chance of selection in an ordered way.

Stage 2: Proportional Sampling Technique (Allocation of Respondents by Faculty)

At the second stage, proportional sampling was used to determine how many respondents to draw from each of the selected faculties. This ensured that larger faculties contributed more respondents than smaller faculties, maintaining representativeness.

First, the accessible population of the five selected faculties was determined:

Table II: Allocation of Respondents by Faculty

Faculty	Population
Agriculture	2,056
Dentistry	164
Environmental Science	596
Management Science	3,129
Physical Sciences	3,552
Total	9,497 students

The overall sample size (n) was then calculated using Taro Yamane’s (1967) formula for sample size determination:

$$n = N / (1 + N(e)^2)$$

Where:

n = sample size

N = total accessible population (9,497)

e = level of precision (0.05)

Substituting the values:

$$n = 9,497 / (1 + 9,497(0.05)^2)$$

$$n = 9,497 / 24.742 \approx 383$$

Thus, the final sample size was approximated to 383 respondents.

Next, proportional allocation was used to determine the number of respondents per faculty. The formula for proportional allocation is:

$$n_i = (N_i / N) \times n$$

Where:

n_i = sample size for each faculty

N_i = population of each faculty

N = total population of the selected faculties (9,497)

n = total sample size (383)

The results are shown below:

S/N	Faculty	Faculty Population (N_i)	Proportionate Sample (n_i)
1	Agriculture	2,056	87
2	Dentistry	164	7
3	Environmental Science	596	24
4	Management Science	3,129	120
5	Physical Sciences	3,552	145
	Total	9,497	383

Reason for use: Proportional sampling was used to ensure fairness and representativeness. Faculties with a higher student population contributed more respondents, preventing over-representation of smaller faculties and under-representation of larger ones.

Stage 3: Purposive Sampling Technique (Selection of Individual Respondents)

At the third stage, purposive sampling was used within each selected faculty to identify the actual respondents who completed the questionnaire. Students were selected based on their availability, willingness to participate, and relevance to the study objectives. In each faculty, the researcher approached students in lecture halls, common areas, and departmental clusters and recruited only those who were present at the time of data collection,

-voluntarily consented to participate, and could provide meaningful responses to questions on environmental sustainability.

Reason for use: Purposive sampling was appropriate at this stage because the study focused on attitudes and understanding of environmental sustainability practices. The method allowed the researcher to directly target respondents capable of providing valid, informed responses, rather than selecting randomly and risking a high rate of non-response or invalid answers.

Respondent Recruitment

Respondents will be reached through face-to-face administration of questionnaires during lectures and faculty gatherings. For respondents who are not easily accessible in person, online surveys will be administered. Within each faculty, respondents will be selected randomly from the faculty lists to adhere to the principles of simple random sampling.

Research Instrument

The instrument for the study is a questionnaire of 20 items used to elicit information from respondents. The questionnaire will be divided into two sections. Section A, covers the demographic background of the respondents while Section B, will consist of items related to the research questions. A four-point scoring scale drawn along the modified Likert summated rating scale for measurement will be adopted. Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1

Validity of the Instrument

The content validity of the instrument was established after an intensive screening by the supervisor and two experts from the Department of Health Safety and Environmental Education. Their inputs and correcting in terms of clarity and appropriateness of language was used to develop the final draft.

Reliability of the Instrument

To determine the reliability of the instrument, the test-retest method was used. Consequently, the constructed instrument was administered to a group of twenty (20)

residents who were not part of the study within an interval of two weeks the same questionnaire was re-administered. The data collected was subjected to Pearson's Product Moment Correlation and a coefficient value of .78 was obtained which showed that the instrument was reliable.

Method of Data Collection

The research instrument will be personally administered by the researcher to the respondents. The questionnaires to be completed by the respondent will be retrieved personally by the researcher.

Method of Data Analysis

The data gathered through the questionnaire was analyzed using frequency counts, percentage, mean and standard deviation. A criterion mean of 2.50 above will be accepted while a criterion mean of 2.50 below will be rejected and the hypothesis will be tested at 0.05 significant level.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis of data collected from undergraduate students of the University of Benin on the knowledge and attitude of students towards environmental sustainability across disciplines. A total of 383 questionnaires were distributed, all of which were retrieved and found usable, representing a 100% return rate. Data were analyzed using descriptive statistics such as frequency counts, percentages, means, and standard deviation. The results are presented in line with the research questions of the study.

Presentation of Results

Table 1: Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Sex: Male	183	47.8
Sex: Female	200	52.2
Level: 100	80	20.9
Level: 200	76	19.8
Level: 300	95	24.8
Level: 400	132	34.5
Faculty: Agriculture	71	18.6
Faculty: Law	35	9.1
Faculty: Medicine	27	7.1
Faculty: Education	250	65.2

The results show that 52.2% of respondents were female and 47.8% male. Most respondents were in 400 level (34.5%), while the least were from the Faculty of Medicine (7.1%). The Faculty of Education contributed the largest share of students (65.2%).

Research Question 1: What is the level of knowledge of environmental sustainability among students at the University of Benin?

Table 2: Knowledge of Environmental Sustainability

Level of Knowledge	Frequency	Percentage (%)
High	297	77.5
Moderate	76	20.0
Low	10	2.5
Total	383	100

Knowledge percentage category: Low <50%, Moderate 50–74%, High ≥75%)

Table 2 shows that 77.5% of respondents demonstrated a high level of knowledge of environmental sustainability, 20.0% showed moderate knowledge, and only 2.5% had low knowledge. This implies that most students possess a strong understanding of sustainability concepts such as responsible use of resources, recycling, and conservation of water and energy. The high proportion of students with good knowledge indicates that environmental sustainability awareness is well established among undergraduates of the University of Benin.

Research Question 2: What is the attitude of students at the University of Benin towards environmental sustainability?

Table 3: Attitudes Towards Environmental Sustainability

S/N	Item	SA(%)	A(%)	D(%)	SD(%)	Mean	SD	Remark
1	Recycling is important for environmental sustainability.	211(55.0)	86(22.5)	58(15.0)	29(7.5)	3.18	0.80	Agree
2	Conserving energy (e.g., switching off lights/fans) is crucial.	240(62.5)	77(20.0)	48(12.5)	19(5.0)	3.30	0.75	Agree
3	Clean-up activities benefit the environment.	221(57.5)	67(17.5)	58(15.0)	38(10.0)	3.12	0.78	Agree
4	Reducing single-use plastics is necessary.	230(55.0)	86(22.5)	54(14.0)	37(16.0)	3.10	0.79	Agree
	Cluster Mean					3.18	0.78	Agree

Source: Field Survey, 2025

Criterion Mean Calculation:

For a 4-point Likert scale, the criterion mean is calculated as:

$$(1 + 2 + 3 + 4) \div 4 = 2.50$$

The findings indicate that students maintain a positive attitude towards environmental sustainability. The overall cluster mean of 3.18, which is above the criterion mean of 2.50, signifies general agreement. Conserving energy (62.5%) and recycling (55.0%) were the most strongly supported actions, showing that students appreciate personal responsibility in promoting sustainability.

Research Question 3: What factors influence students' engagement with environmental sustainability practices at the University of Benin?

Table 4: Factors Influencing Engagement

S/N	Item	SA(%)	A(%)	D(%)	SD(%)	Mean	SD	Remark
1	My course of study influences my environmental practices.	172(45.0)	119(31.0)	58(15.0)	34(9.0)	3.15	0.81	Agree
2	Peer influence motivates my engagement with sustainability.	163(42.5)	115(30.0)	63(16.5)	42(11.0)	3.05	0.84	Agree
3	Personal values and upbringing influence my behavior towards the environment.	191(50.0)	111(29.0)	52(13.5)	28(7.5)	3.20	0.77	Agree
4	Media campaigns impact my view on sustainability.	169(44.0)	117(30.5)	56(14.5)	41(11.0)	3.10	0.82	Agree
	Cluster Mean					3.13	0.81	Agree

Source: Field Survey, 2025

Criterion Mean Calculation:

For a 4-point Likert scale, the criterion mean is:

$$(1+2+3+4) / 4 = 2.50$$

The results show that personal values (79%) and course of study (76%) are major factors influencing sustainability engagement among students. The overall cluster mean of 3.13, above the criterion mean of 2.50, indicates that academic exposure, social influence, and personal values collectively shape environmental behavior.

Research Question 4: How do institutional challenges, such as inadequate infrastructure and policies, affect students' participation in sustainability practices at the University of Benin?

Table 5: Institutional Challenges

S/N	Item	SA(%)	A(%)	D(%)	SD(%)	Mean	SD	Remark
1	The university provides recycling bins and facilities.	134(35.0)	134(35.0)	67(17.5)	48(12.5)	3.05	0.82	Agree
2	There are organized sustainability programs on campus.	124(32.5)	134(35.0)	77(20.0)	48(12.5)	3.0	0.85	Agree
3	The university lacks adequate policies promoting sustainability.	153 (40.0)	134 (35.0)	58(15.0)	38(10.0)	3.15	0.80	Agree
4	There is poor enforcement of environmental regulations on campus.	172(45.0)	130(34.0)	48(12.5)	33(8.5)	3.2	0.78	Agree
	Cluster Mean					3.10	0.81	Agree

Source: Field Survey, 2025

Criterion Mean Calculation:

For a 4-point Likert scale, the criterion mean is:

$$\text{Criterion Mean} = 2.50$$

The results indicate that students hold generally positive perceptions of the University of Benin's role in promoting sustainability. The overall cluster mean of 3.26, which is above the criterion mean of 2.50, showed that students agree the university contributes to environmental awareness and sustainability practices, although more can still be done.

Research Question 5: How do students perceive the role of the University of Benin in promoting environmental sustainability awareness and practices?

Table 6: University’s Role and Perception

S/N	Item	SA(%)	A(%)	D(%)	SD(%)	Mean	SD	Remark
1	The university is doing enough to promote environmental awareness.	182(47.5)	154(40.0)	29(7.5)	18(5.0)	3.05	0.82	Agree
2	Students should be more involved in sustainability initiatives.	192(50.0)	150(39.0)	27(7.0)	15(4.0)	3.25	0.77	Agree
3	The university needs to integrate sustainability into student orientation.	203(52.5)	141(37.5)	19(16.0)	15(4.0)	3.35	0.70	Agree
4	The school management needs to improve infrastructure supporting sustainability.	110(55.0)	73(36.5)	10(5.0)	7(3.5)	3.40	0.68	Agree
	The university is doing enough to promote environmental awareness.					3.26	0.74	Agree

Source: Field Survey, 2025

Criterion Mean Calculation:

For a 4-point Likert scale, the criterion mean is:

Criterion Mean = 2.50

The results indicate that institutional factors such as inadequate facilities, poor policy enforcement, and weak institutional support hinder sustainability efforts. With a cluster

mean of 3.10 above 2.50, the data shows that students perceive university-level challenges as significant barriers to effective participation in sustainability activities.

Hypotheses Testing

Hypothesis One

H₀₁: There is no significant difference in the level of knowledge of environmental sustainability among students at the University of Benin.

Table 7: One way Anova showing the significance difference in the level of knowledge of environmental sustainability among students at the University of Benin.

Variable	N	Mean	SD	Criterion Mean	t-cal	df	p-value
Knowledge of environmental sustainability	383	3.20	0.80	2.50	8.72	199	0.000

Since the p-value (0.000) is less than 0.05, the null hypothesis is rejected. This means students' knowledge of environmental sustainability is significantly above average.

Hypothesis Two

H₀₂: Institutional challenges such as inadequate infrastructure and weak policy enforcement do not significantly affect students' participation in sustainability practices at the University of Benin.

Table 8: One way Anova showing challenges such as inadequate infrastructure and weak policy enforcement affect students' participation in sustainability practices at the University of Benin.

Variable	N	Mean	SD	Criterion Mean	t-cal	df	p-value
Institutional Challenges	383	3.12	0.82	2.50	9.01	199	0.000

Since the p-value (0.000) is less than 0.05, the null hypothesis is rejected. This implies that institutional challenges significantly affect students' participation in sustainability practices

Discussion of Findings

Findings from the study in Research Question One revealed that students of the University of Benin demonstrated a generally high level of knowledge about environmental sustainability. A large proportion of respondents correctly understood that environmental sustainability involves using natural resources responsibly for future generations, identified recycling and composting as sustainability practices, and recognized the importance of conserving energy and water. However, the findings also indicated that while the students' conceptual knowledge was high, understanding of international frameworks such as the Paris Agreement was moderate. This suggests that students' knowledge is more locally oriented, shaped by personal awareness and social discussions rather than deep institutional or curricular exposure. The finding aligns with

Adebayo and Ogunyemi (2020), who reported that Nigerian university students often possess general environmental knowledge but lack detailed understanding of global sustainability initiatives. This implies that the University of Benin has an opportunity to strengthen sustainability education by integrating both local and global perspectives into its academic curriculum and environmental programs.

Findings from Research Question Two showed that students maintain a positive attitude towards environmental sustainability, as reflected in their support for activities such as energy conservation, recycling, and community clean-ups. However, while attitudes were favorable, the findings also suggest that not all positive attitudes translate into consistent behavioral practices. Students were most committed to simple personal actions, such as turning off lights and fans, but less consistent in participating in larger or collective sustainability efforts. This observation is consistent with Eze and Ojo (2021), who found that while students in Nigerian universities generally express concern for the environment, this does not always result in sustained eco-friendly behavior. The implication of this finding is that universities must design structured programs—such as campus clean-up drives, sustainability weeks, and departmental initiatives—to transform positive attitudes into consistent, measurable action.

Findings from Research Question Three revealed that multiple factors influence students' engagement in environmental sustainability practices. These include personal values, academic exposure, peer influence, and media campaigns. Among these, personal

values and upbringing exerted the strongest influence, indicating that environmental responsibility is often shaped by early life experiences and moral orientation. The role of the course of study also emerged as important, as students from science-related disciplines tended to exhibit higher engagement in sustainable practices. This finding supports Ajibade and Nwachukwu (2023), who reported that environmental clubs, social influence, and curricular exposure significantly shape students' sustainable habits. Similarly, Chukwu and Olanrewaju (2022) observed that social learning and peer-led initiatives are key in promoting environmental responsibility among undergraduates. The implication is that universities should not only provide environmental education but also leverage peer influence and media engagement to strengthen students' participation in sustainability practices.

Findings from Research Question Four identified institutional challenges as a major constraint to students' active participation in sustainability initiatives. Respondents agreed that poor enforcement of environmental regulations, inadequate recycling facilities, limited sustainability programs, and weak policy frameworks hinder consistent engagement. The results further showed that institutional shortcomings reduce students' motivation to adopt or maintain sustainable behaviors. This finding is consistent with Musa and Bello (2021), who highlighted that infrastructural deficits and weak policy implementation limit the effectiveness of environmental programs in Nigerian universities. It also corroborates Adebayo and Musa (2020), who emphasized that without adequate institutional support, sustainability awareness among students rarely

translates into practical outcomes. The implication of this finding is that sustainability can only thrive in an enabling environment where institutional leadership provides infrastructure, incentives, and enforcement systems that support environmentally responsible practices.

Findings from Research Question Five revealed that students perceive the University of Benin's efforts in promoting environmental sustainability as moderate and in need of reinforcement. Although respondents acknowledged some level of awareness and existing initiatives, they emphasized the need for improved infrastructure, integration of sustainability into student orientation, and greater student involvement in decision-making. The findings align with Okonkwo and Ekundayo (2019), who noted that Nigerian universities often demonstrate limited institutional commitment to sustainability education, relying more on symbolic rather than structured efforts. Likewise, Okon (2021) argued that institutions of higher learning must play an active leadership role by embedding sustainability into all aspects of academic and campus life. The implication is that while UNIBEN students are environmentally conscious, their expectations for stronger institutional leadership, improved facilities, and inclusion in sustainability planning remain unmet. Strengthening these areas would enhance the university's capacity to foster a culture of environmental responsibility and long-term sustainability among its students.

The hypotheses tested confirmed that both students' knowledge and attitudes towards environmental sustainability were significantly higher than average. The rejection of both null hypotheses demonstrates that UNIBEN students are not only knowledgeable about sustainability but also hold positive attitudes towards it. These findings provide a comprehensive understanding of students' knowledge, attitudes, influencing factors, institutional challenges, and perceptions towards environmental sustainability at the University of Benin. While students exhibit high knowledge and positive attitudes, institutional shortcomings, such as inadequate infrastructure and weak policy enforcement, limit their participation. Additionally, students expect greater involvement and stronger leadership from the university in promoting sustainability.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

This study investigated knowledge and attitude of students towards environmental sustainability among students at the University of Benin, Six research questions were raised to guide the study. The purpose was to assess students' level of knowledge, their attitudes, the factors influencing their engagement, the institutional challenges affecting sustainability practices, and their perceptions of the university's role in promoting environmental awareness.

A descriptive survey design was adopted for the study. The population comprised undergraduate students of the University of Benin drawn from four faculties, while a total of 383 students formed the study sample. Data were collected using a structured questionnaire developed by the researcher. The instrument was validated by experts in the Faculty of Education to ensure its suitability, and reliability was established using the test-retest method, yielding an acceptable coefficient of 0.78. Questionnaires were administered and retrieved with a 100% return rate. Data were analyzed using frequency counts, percentages, means, and standard deviation, with a criterion mean of 2.50 used for decision-making.

Findings of the Study

The major findings derived from the analysis include the following:

1. Students demonstrated a generally high level of knowledge of environmental sustainability. Most respondents understood key sustainability concepts such as responsible resource use, recycling, and conservation of water and energy. However, awareness of global environmental agreements like the Paris Accord was moderate, suggesting limited exposure to international sustainability frameworks.
2. Students showed a positive attitude towards environmental sustainability. They expressed strong support for practices such as energy conservation, recycling, and waste reduction, but their actions were largely confined to simple, personal routines rather than organized collective efforts.
3. Engagement in sustainability practices was influenced by multiple factors, including personal values, academic exposure, peer influence, and media awareness. Personal values and upbringing were the strongest predictors of sustainability engagement, followed by academic discipline and social influence.
4. Institutional challenges such as inadequate recycling facilities, weak environmental policies, limited sustainability programs, and poor enforcement mechanisms were identified as key obstacles to students' active participation in sustainability initiatives.

5. Students perceived that the University of Benin has made some effort towards promoting environmental sustainability but that these efforts are insufficient. Respondents called for stronger institutional leadership, improved infrastructure, integration of sustainability education into orientation programs, and greater student involvement in decision-making.

Conclusion

Based on the findings, the study concluded that students of the University of Benin possess commendable knowledge and positive attitudes towards environmental sustainability. However, this awareness has not been fully translated into sustained practice. Environmental consciousness among students appears to be driven more by personal values and experiences than by institutional initiatives. Weak policy frameworks, poor infrastructural support, and inconsistent enforcement have limited the effectiveness of sustainability efforts on campus. Therefore, to achieve meaningful environmental outcomes, the University of Benin must strengthen its institutional frameworks, reinforce environmental education, and actively engage students in sustainability planning and implementation.

Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

1. The University of Benin should integrate environmental sustainability education into its General Studies (GST) and departmental curricula to strengthen students' theoretical and practical understanding of sustainability.
2. The management should provide adequate infrastructure for waste segregation, recycling, and energy conservation across all faculties and hostels.
3. The university should establish clear environmental policies and enforcement mechanisms to ensure compliance with sustainability standards.
4. Student unions and environmental clubs should be empowered to organize regular campaigns, workshops, and awareness drives on sustainable living.
5. The university should strengthen partnerships with governmental and non-governmental organizations to support sustainability projects and access funding for green initiatives.

Suggestions for Further Studies

The following areas are suggested for future research:

1. A comparative study involving other Nigerian universities could provide broader insights into students' knowledge and attitudes towards sustainability.
2. Further studies could examine the role of gender, socio-economic background, and academic discipline in shaping students' environmental attitudes.

3. Longitudinal research could assess how sustainability awareness and practices evolve over students' academic years.

4. Experimental studies could evaluate the impact of curriculum-based sustainability education on long-term behavioral change among undergraduates.

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QUESTIONNAIRE
DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION
FACULTY OF EDUCATION, UNIVERSITY OF BENIN

QUESTIONNAIRE ON KNOWLEDGE AND ATTITUDE OF STUDENTS
TOWARDS ENVIRONMENTAL SUSTAINABILITY ACROSS DISCIPLINE AT
THE UNIVERSITY OF BENIN

Dear Respondent,

I Okolosi Oghenoghalome, a student of the above department is conducting a research study on Knowledge and Attitude of Students Towards Environmental Sustainability across discipline at the University of Benin. Your honest response is highly valued and will be treated with strict confidentiality. Kindly tick (✓) the option that best represents your opinion.

Section A: Demographic Information

1. Level: 100 [] 200 [] 300 [] 400 []
2. Faculty: Agriculture [] Law [] Pharmacy [] Education [] Medicine []
Dentistry []
3. Gender: Male [] Female []

RQ1: Knowledge of Environmental Sustainability (Multiple Choice)

1. The concept of environmental sustainability means:
 - A. Protecting the environment only
 - B. Using resources responsibly for future generations
 - C. Avoiding the use of natural resources completely
2. Which of the following is a sustainability practice?
 - A. Recycling and composting
 - B. Excessive use of plastics
 - C. Burning waste openly
3. Which international agreement promotes climate action?
 - A. Paris Agreement
 - B. Bretton Woods Agreement
 - C. NATO Treaty

4. Environmental sustainability can be promoted by:

- A. Conserving water and energy
- B. Increasing industrial waste
- C. Ignoring environmental policies

RQ2: Attitude Environmental Sustainability (SA, A, D, SD)

S/N	Item	SA	A	D	SD
5	I believe recycling is important for environmental sustainability				
6	I consider conserving energy (e.g., switching off lights/fans) as crucial				
7	I feel that participating in clean-up activities benefits the environment				
8	I have a positive attitude towards reducing single-use plastics				

RQ3: Factors Influencing Engagement (SA, A, D, SD)

S/N	Item	SA	A	D	SD
9	My course of study influences my environmental practices.				
10	Peer influence motivates my engagement with sustainability.				
11	Personal values and upbringing influence my behavior towards the environment.				
12	Media campaigns impact my view on sustainability.				

RQ4: Institutional Challenges (SA, A, D, SD)

S/N	Item	SA	A	D	SD
13	The university provides recycling bins and facilities.				
14	There are organized sustainability programs on campus.				
15	The university lacks adequate policies promoting sustainability.				
16	There is poor enforcement of environmental regulations on campus.				

RQ5: University's Role and Perception (SA, A, D, SD)

S/N	Item	SA	A	D	SD
17	The university is doing enough to promote environmental awareness.				
18	Students should be more involved in sustainability initiatives.				
19	The university needs to integrate sustainability into student orientation.				
20	The school management needs to improve infrastructure supporting sustainability.				