PROMOTING SUSTAINABLE WASTE MANAGEMENT PRACTICES IN TAI SOLARIN UNIVERSITY OF EDUCATION (TASUED) THROUGH AWARENESS AND ADVOCACY

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Advocacy, Awareness Creation, Environmental Conservation, Waste Management Practices, Sustainable Development

Abstract

Research Problem: *Waste generation and disposal have been recognised as serious issues within University communities in developing countries, including Nigeria. Students' attitudes and behaviours have posed a significant threat to positive waste management practices. The study examines the extent to which awareness and advocacy shape students' waste management practices. The study's population comprises all students of Tai Solarin University of Education (TASUED), Ijagun, Ogun State.*

Methods/Theory: *The area of study was selected using a stratified random sampling procedure, while five thousand two hundred and fifty-nine (5,259) students were selected. The instruments used for this study were the "Environmental Campaigns and Sustainable Waste Management Questionnaire" (ECSWMQ). Data were analysed using descriptive statistics, including simple percentages, means, and standard deviations.*

Results: *The findings showed that awareness creation and advocacy significantly improved student waste management practices by stimulating their enthusiasm to guide fellow students, encouraging collective action, strengthening their desire to support institutional staff in modeling positive waste management practices, and shaping their attitudinal habits regarding waste management. Despite this, other findings of the study indicate that students' intention to embrace positive waste management practices after the awareness and advocacy were restrained by factors such as: inaccessible recycling agents, inadequate designated waste*

bins/dumpsites, unrewarding incentives from recycling agents, inaccessible garbage collectors, insufficient space for waste segregation, and time constraints for careful and constant waste disposal.

Conclusion: *The study concludes that awareness creation and advocacy significantly improved students' waste management practices, yet certain factors, such as infrastructural, motivational, and time constraints, still restrain their intention to adopt positive waste management practices.*

Key Contribution to Knowledge: *It shed more light on how positive waste management practices can be encouraged among students through effective awareness creation and advocacy.*

Recommendation: *It is recommended that the university establish a center for environmental conservation and renewable energy, attract sustainable waste management companies that use technological devices to convert waste into currency, and set up a "Sustainable Waste Management Trust Fund" (SWMTF), among other sustainable waste management strategies.*

Introduction

A significant challenge facing developing nations is the perilous management of garbage produced by human activities (Adeolu, Enesi & Adeolu, 2014). In addition to inadequate infrastructure and funding, the deteriorating waste management in Nigeria can also be attributed to the increasing population, along with a lack of awareness and advocacy efforts. Statistics indicate that the student population, particularly in Nigerian universities, is seeing rapid growth. In 2022, private institutions enrolled 102,500 students, whilst public universities had 1,751,761 students (Alagbe, 2022). The expanding student population in these schools leads to an increase in trash generation and management, exacerbated by inadequate waste management techniques.Waste disposal refers to the elimination or destruction of damaged, used, or otherwise undesirable residential, agricultural, or industrial products and materials (Czajczyńska et al., 2017). Waste disposal encompasses several methods, including landfilling, the burial of waste in engineered sites; incineration, the combustion of waste to diminish volume and generate energy; recycling, the transformation of materials into new products; composting, the decomposition of organic matter; and waste-to-energy conversion, the process of converting refuse into usable energy, among others (Bakare, 2020; Ojuri et al., 2024; Ugwu, 2021).

Despite the seemingly negative environmental views of young individuals, they ultimately contribute directly to the provision of knowledge-based solutions for future ecological challenges (Adetola & Omonijo, 2019). Residents of Ogun State, Nigeria, continue to encounter significant difficulties regarding solid waste generation and disposal. Nevertheless, current research fluctuates between the urgent necessity to adopt sustainable waste management practices, various waste management strategies, the advantages and constraints inherent to each approach, and the potential challenges hindering the implementation of effective waste management practices in Nigerian universities (Ojuri et al., 2024; Ugwu, 2020; Ugwu, 2021; Bakare, 2020; Afolabi et al., 2018; Adeniran et al., 2017). The studies concentrate on the influence of the legal-institutional policy framework, adaptive ability, and infrastructural adequacy on

sustainable waste management practices. Consequently, neglecting the behavioural dimensions of students and the potential application of the University's institutional framework to affect the socio-cultural factors influencing their disposition and attitude towards waste management practices (Gomeseria, 2019) is problematic.

Scholars generally agree that awareness and advocacy are crucial institutional frameworks and channels for projecting, embracing, promoting, or articulating the university's culture, mission, and vision by relevant stakeholders both within and outside the university community (Kingsley, 2010; Cruz et al., 2022). Awareness ensures that University members are informed of certain policies, rights, responsibilities, developments, opportunities, or difficulties unique to its existence by intentional efforts by its designated departments or units (Cruz et al, 2022). Advocacy, conversely, centres on expressing and promoting a certain agenda, interest, necessity, or priority of the University or its constituents. This frequently manifests as advocacy for funding, novel concepts, enhanced policies, equity, student welfare, or improved working circumstances (Kingsley, 2010). Clearly, it is noted that the financial viability of universities in Nigeria relies on greater student enrolment each session, which is considerably affecting environmental capacity. In addition to the significant expenses associated with trash management at Tai Solarin University of Education (TASUED), students' efforts to maintain a garbage-free environment have elicited certain concerns. The study investigates how knowledge and advocacy influence students' waste management habits at Tai Solarin University of Education in Ijagun, Ogun State.

Statement of Problem

The university community exacerbates environmental deterioration by neglecting the principles of the three Rs: reduce, reuse, and recycle garbage (Ugwu, 2020; Ugwu, 2021). The university community is anticipated to maintain particular norms and exemplify them; yet, various variables compromise this expectation. Nonetheless, inadequate garbage disposal continues to be a substantial issue in Nigeria and inside university campuses. A critical concern currently is that individuals deplete resources from surrounding ecosystems at a rate beyond their natural replenishment, jeopardising the essential life-support systems that sustain humanity (Ojuri et al, 2024).

At Tai Solarin University of Education (TASUED), despite established waste management protocols through contractual agreements with private entities, effective waste management within the university continues to be a challenge. The garbage generation exceeds the capacity for collection and removal, leading to accumulation in various areas of the University, particularly during major events. This may ultimately have health implications for the University community.This study examines inadequate solid waste disposal procedures and aims to enhance understanding of sustainable solid waste management on university campuses, particularly at TASUED campuses. The evolution of the University as a system is largely dependent on the management of its environment. Improper management of generated garbage will impede overall growth, adversely impact the health and well-being of residents, diminish workers' morale, and generally disrupt the socio-academic environment within the University community, so obstructing advancement. The waste management method influences the environment and impacts overall development initiatives. The study examines how sustainable waste management practices may be promoted and maintained through awareness initiatives and advocacy to positively alter the negative attitudes of the

university community around garbage disposal at TASUED, Ogun State.

Research Objectives

The study will investigate solid waste management practices on the Tai Solarin University of Education (TASUED) campuses to promote sustainable waste management. Other specific objectives are to:

investigate waste management practices among Students in TASUED

assess the contributory factors towards poor waste management practices in TASUED, Ijagun, Ogun State.

determine ways and means to create awareness and advocate for positive waste management practices at TASUED, Ijagun, Ogun State.

identify factors that restrained student intention to embrace positive waste management practices, after the advocacy and awareness program.

Literature Review

Solid Waste Management

Solid waste management is a conceptual framework that reflects human attitudes, behaviours, and capabilities in managing non-biodegradable solids generated from anthropogenic and zoonotic activities, including industrial byproducts and municipal refuse, deemed superfluous, intended for disposal, unwanted, potentially hazardous, or legally mandated for disposal. Krukru (2015) and Czajczyńska et al. (2017) assert that solid waste is classified into two categories: biodegradable and non-biodegradable. Biodegradable garbage encompasses items such as food remnants, foliage, cotton, textiles, banana peels, and paper, all of which can be rapidly decomposed by natural processes. According to Orhorhoro & Oghoghorie (2019), non-biodegradable wastes are those that cannot be decomposed or eliminated by natural processes. They can be repurposed or recycled. Examples of such refuse include bottles, glasses, plastics, cans, various wrappings, nylon bags, metals, needles, syringes, and wood. Krukru (2015) asserted that solid wastes can be categorised based on their degree of environmental pollution, which ascertains their classification as hazardous or non-hazardous to humans and the environment.

Solid waste is categorised into municipal, industrial, and agricultural waste (Davidson, 2011; Ejaz et al., 2010; Olayinka et al., 2024; Giusti, 2009). Beyond its literal meaning, waste management possesses a comprehensive conceptual framework that includes an integrated cycle of waste generation and its resultant effects, anticipated outcomes that face systemic challenges and traditional structures, a crucial indicator of sustainable development, and a paradigm for a functional circular economy. This perspective, viewed as a cycle, underscores the generation of waste and the suitable mechanisms for its management, encompassing waste collection and storage, transportation, treatment, and disposal as an integrated process with environmental and social implications for humanity and the environment (Davidson, 2011; Ejaz et al., 2010; Giusti, 2009; Mazhindu et al., 2012; Omang et al., 2021).

According to Giusti (2009) and Davidson (2011), waste management encompasses the processes and actions necessary to oversee garbage from its origin to its ultimate disposal. This include the collection, transportation, treatment, and disposal of trash, along with the monitoring and regulation of the waste management process. Ejaz et al. (2010), Mazhindu et al. (2012), and Omang et al. (2021) emphasise that inadequate solid waste disposal and management contaminate the ecosystem in various ways, affecting air, land, and water quality. Surface and groundwater sources are polluted due to indiscriminate garbage disposal. Solid trash obstructs urban

drainage systems, leading to stagnant water that attracts mosquitoes and causes overflow during rainy seasons. The unregulated combustion of solid waste and inadequate incineration substantially exacerbate urban air pollution in numerous places. Inadequate solid waste management can create health and safety risks, as insects and rodents are attracted to waste and can transmit diseases like cholera and dengue fever.

Contaminated bathing, food irrigation, and drinking water due to solid waste can expose individuals to pathogenic organisms and various poisons.Waste management serves both as a means and an aim, influenced by systemic challenges and traditional frameworks for its implementation (Godfrey et al., 2020; Omole, 2016; Ojuri et al., 2024). These subject difficulties and traditional frameworks may manifest as governance capacity, institutional framework, economic viability, infrastructural integrity, or social sustainability to tackle environmental-related issues. Omole (2016) asserts that inadequate waste management, detrimental to the environment and public health, frequently arises from the expansion of unregulated settlements, transportation congestion, instability, and illiteracy. Godfrey et al. (2020) asserted that waste management methods are a crucial strategy for achieving sustainability, accompanied by environmental and public health considerations. Nonetheless, other obstacles, such as deficient organisational frameworks, a scarcity of competent personnel, inadequate finance, feeble legislation, insufficient enforcement, limited public awareness, corruption, conflict, political instability, and a lack of political will, have impeded its fulfilment.In other words, waste management serves as a crucial metric for sustainable development. This serves as a criterion for assessing the degree to which present human demands or consumption jeopardise future attempts (Adebajo & Olayinka, 2021; Kopecká, 2024; Obiorah et al., 2025).

Consequently, waste management acts as a catalyst for rehabilitation when society effectively manages its disposable resources, protects its environment, and fosters both current and future public well-being. The Waste Mission (2024) emphasised that sustainable waste management prioritises the reduction of natural resource use while pursuing solutions that do not jeopardise human health or the environment. Supporting this assertion, Obiorah et al. (2025) indicate that innovative waste management will improve social, economic, and environmental sustainability by mitigating the detrimental impacts of climate change. He observed that a major advantage of effective waste management practices is the diminishment of emissions of short-lived climatic pollutants (SLCPs), which contribute to global warming, including methane from landfills and black carbon from open burning. Clearly, Goals 6 (Clean Water and Sanitation), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), 13 (Climate Action), and 14 (Life Below Water) of the United Nations Sustainable Development Goals pertain to environmental conservation (United Nations Sustainable Development Goals, 2025).

Moreover, waste management has been identified as a paradigm for a sustainable circular economy that advantages both the general populace and governmental entities (Oo et al, 2024; Unegbu, 2025; Obed-Ojukwu & Ugwueke, 2025; Olayinka et al, 2024; World Bank Group, 2024). An average individual, who often serves both as a generator of trash and a key participant in waste management, has the capacity to achieve financial sustainability (World Bank Group, 2024). Novel garbage disposal methods and strategies. Prominent among them are: recycling, upcycling of reusable materials,

sorting and commercialisation of renewable waste, transformation of waste into an energy source, profitable employment or entrepreneurial ventures arising from waste collection or recycling enterprises, and incentives and grants for recycling initiatives from governmental and non-governmental entities, among others (Unegbu, 2025; World Bank Group, 2024). The government has implemented creative waste management strategies that effectively handle environmental concerns while minimising expenditures (Obed-Ojukwu & Ugwueke, 2025).Consequently, waste management can be viewed as an environmental protection mechanism, a paradigm for financial sustainability, and a metric of sustainable development or social welfare, with its methodologies and results influenced by systemic issues and established frameworks. Despite comprehensive conceptual discussions identifying systemic factors and traditional structures, there is a paucity of empirical studies examining locally adapted strategies aimed at influencing the socio-cultural dimensions of communities. Such strategies are anticipated to enhance attitudinal behaviour towards fostering inclusive participation, innovative waste management practices, and quantifiable sustainability outcomes in addressing environmental issues. Consequently, the results of this investigation are anticipated to fill this need.

Environment Awareness and Advocacy

In their efforts to mould the environment and pursue progress, humans have inflicted significant environmental harm (Pradhan & Panda, 2024). An ecological issue, predominantly driven by human activities, is escalating at an alarming rate (Handoyo, Asina & Mkumbachi, 2019). Consequently, the imperative for citizens to acquire essential knowledge regarding contemporary environmental issues and to evolve into responsible, informed individuals is currently a paramount concern for environmentalists globally. Nevertheless, competing ecological viewpoints, particularly the knowledge-deficit paradigm, have recognised ignorance and informational deficiencies as fundamental causes of inadequate waste management (Cornforth, 2011). The Knowledge, Attitude, Practice (KAP) model and the environmental education-awareness paradigm advocate for enhanced human knowledge and increased public education as beneficial factors and solutions for waste management strategies (Ahmad & Ismail, 2015; Thapa, 2021)

.The discourse on environmental awareness and advocacy encompasses bridging information gaps, altering perceptions and behaviours of individuals or groups, and enhancing policy and institutional capacity to ensure sustainable waste management practices. Pradhan and Pandan (2024) assert that environmental awareness entails the cultivation of consciousness regarding ecological issues, fostering a favourable ecological attitude among the populace. Environmental awareness signifies comprehension of the effects of human conduct on the environment and the cultivation of a constructive attitude towards it. According to Gulliver, Chapman, and Schultz (2020), environmental campaigning is essential for mobilising individuals to confront environmental concerns. This frequently manifests through various activities, including seminars, rallies, protests, legislative bills, environmental activism, online petitions, and lobbying with decision-makers, among other related endeavours that may promote pro-environmental behaviours (Sustainability Directory, 2024; Thapa, 2021).

The effectiveness of environmental awareness and advocacy can be evaluated by the degree to which the behavioural attitudes of individuals or groups within a geographic area have shifted towards waste management or environmental conservation. The influence of

environmental activism and knowledge on the governance framework on environmental issues across various levels of government is essential. The Sustainability Directory (2024) contends that without the integration of environmental advocacy into policy, it remains only a discourse. He emphasised that its efficacy is more accurately evaluated through tangible policy modifications and associated environmental advantages. Although environmental awareness and advocacy aim to alter behavioural attitudes within a particular demographic and enhance their understanding of

effective waste management techniques, campaigning amplifies this awareness. The integration of policy signifies the peak of its expression. Environmental awareness, advocacy, and policy direction are interdependent, sequential, and impactful. Consequently, one cannot be realised without the other, and the characteristics and results of one influence the other.

Solid Waste Management in Ogun State, Nigeria.

The existing literature, including Musah (2009), Omole and Isiorho (2011), Ojo (2014), Oloyede et al. (2014), Adetola and Omonijo (2019), Olukanni et al. (2020), and Oluwafemi (2020), indicates that, as in the past, Ogun State's principal urban centers Abeokuta, Ilaro, Sango-Ota, Sagamu, and Ijebu-Ode are currently confronting the challenge of managing increasing volumes of solid waste in their surroundings. The strategic industrial and commercial hubs are being overwhelmed by the disorganised presence of overflowing dumps and neglected piles of solid waste originating from residential, domestic, or kitchen sources, as well as marketplaces, retail, and business centres (Olukanni et al., 2020). Environmental officers persist in their efforts to combat the illegal and indiscriminate disposal of hazardous commercial and industrial trash in Ogun State.The Ogun State government, during previous administrations, initiated waste management efforts by establishing the Ogun State Environmental Protection Agency (OGEPA) via Ogun State Edict No. 1 of 1995, alongside the formation of the Ministry of Environment under the administration of Otunba Gbenga Daniel (OGEPA, 2017).

The Agency operates under the oversight of the Ministry and, pursuant to the Edict, is tasked with the safeguarding and enhancement of the environment within the State, in collaboration with the Federal Ministry of Environment. One of its primary functions is to advocate for and implement all requirements of Ogun State laws and regulations regarding environmental protection, ensure the safe disposal of hazardous waste created, and address any emerging public environmental concerns (OGEPA, 2017). The present administration instituted the Ogun State Waste Management Authority (OGWAMA) in October 2019 via an Executive Order, which was subsequently codified by the State House of Assembly in July 2020. This authority is tasked with coordinating effective waste collection, waste reduction, and promoting individual and corporate accountability through sustainable waste management practices (OGWAMA, n. d.). The Ogun State Sanitary Advisory Council was recently constituted to enhance waste management (Okojie, 2021).

Waste Management Policy and Implementation in Tai Solarin University of Education (TASUED)

Existing evidence suggests a scarcity of scholarly literature regarding the University's framework for solid waste management. Consequently, individual private contractors are accountable for garbage disposal in accordance with the agreement with the university administration. The contractors lack records regarding the volume, rate, or trends of solid waste production. Solid trash is disposed

of in the open on campus and then incinerated adjacent to the University's clean water facility. The contractors position waste receptacles in optimal locations throughout the campus. Students from diverse colleges occasionally participate in waste collecting, particularly following the convocation ceremony and other university celebrations.Nonetheless, according to these observations and personal experience, solid waste management (SWM) at TASUED seems to suffer from inefficient collection methods, insufficient coverage of the collection system, improper waste disposal practices, lack of institutional coordination, inadequate financial resources, absence of enforceable regulations and standards, and deficiency in appropriate technology.

Methodology

Population of Study

The study population comprises the complete student body of Tai Solarin University of Education, Ijagun, Ogun State. TASUED is a non-profit public higher education institution situated in Ijagun, a suburban area inside the tiny metropolis of Ijebu-Ode (population between 50,000 and 249,999), Ogun State, Nigeria. It was founded in the late 1970s as an institution of higher learning in education. The institution attained university status in education in February 2005. It is the foremost University of Education in Nigeria, boasting a student enrolment of 29,623 and a faculty count over 1,050 (TASUED, 2024). The institution provides degree programs in education, science, social sciences, arts, and vocational education at both undergraduate and postgraduate levels. The institution features an e-learning facility that offers Internet and additional services to the academic community (TASUED, 2015).The University currently has six colleges for undergraduate programs and one postgraduate college, which are further separated into multiple departments. The institutions comprise the College of Specialised and Professional Education (COSPED), College of Science and Information Technology (COSIT), College of Humanities (COHUM), College of Social and Management Sciences (COSMAS), College of Vocational and Technology Education (COVTED), College of Agriculture and Hospitality Management, and the Postgraduate College (TPC). (TASUED, 2024). It also features student residence halls (hostels). Students also inhabit dormitories constructed by local community people, such Ijagun, Ijele, and Imaweje. The demographic is chosen due to the presence of concerns concerning appropriate waste management methods within the institution.

Sample and Sampling Technique

The sample size of the study was five thousand (5,259) students of Tai Solarin University of Education, Ijagun, Ogun State. The sample size was selected using Taro Yamane, with a confidence level *of 95%* and a margin of error of about *1.22%*. The sampling techniques are appropriate because they allow the study to obtain a sample that best represents the entire population and also ensure that the whole population has an equal chance of being selected for the study.

Instrumentation

A self–structured questionnaire, tagged "Environmental Campaigns and Sustainable Waste Management Questionnaire" (ECSWMQ), was adopted for the study. The questionnaire consists of thirty-five (35) closed-ended questions. The questions were weighed based on a five-point Likert scale. Thus, Never, Rarely, Sometimes, Often and Always were used for questions related to waste management practices across universities in Ogun State; Strongly agree, agree, neutral, disagree and strongly disagree for question related contributory factors responsible for poor waste management

practices in TASUED and threats restraining students from embracing positive waste management practices; while significantly improved, improved, slightly improved, no significant improvement and worsened was used for questions related to the extent to which advocacy and awareness shape positive waste management practices at TASUED, Ijagun, Ogun State.

Data Collection

The administration of the instrument was carried out in four stages.

Stage One: division of students by hall of residence and college. Five (6) Colleges (COSPED, COSIT, COHUM, COSMAS, COVTED, and TPC) in the university. The University-owned hostels and some privately owned hostels near the main campus were selected using a stratified, proportionate random sampling technique. This is due to high population density and the presence of open waste dump sites in the area. This can be achieved within four weeks.

Stage Two: carrying out a waste management awareness and advocacy campaign using one week in hostel concentrated areas, including the University-owned hostel. This was achieved in 8 weeks.

Stage Three: distribution of the copies of the questionnaire to 5,259 students, while 5,001 copies were retrieved. This was also to be done within four weeks.

Stage Four: collation of data and analysis of the data. This was done in 4weeks.

Data Analysis

The collected data were analysed using the Statistical Package for the Social Sciences (SPSS) version 30.0. The collected data were quantitatively summarised using means and standard deviations, while categorical variables were summarised using frequencies and percentages. Tables and charts were used to present the results. Individual consent was obtained from the respondents before administering the questionnaire.

Result of Findings

Research Question 1: What are the waste management practices across universities in Ogun State?

Table 1

Distributions of waste management practices among students in TASUED, Ijagun, Ogun State.

Items	N	Mean	SD
Recycling	5001	1.64	1.220
Waste Sorting/Segregation	5001	1.78	1.221
Careful and constant disposition of refuse	5001	2.10	1.437
Usage of designated waste bins	5001	3.09	1.573
Avoiding single-use plastics	5001	4.06	1.093
Land filling	5001	3.79	1.129
Dumping of waste at the back of the school hostel/open spaces	5001	3.78	1.161
Dumping of waste by roadside or flowing rivers	5001	3.59	1.200
Waste burning	5001	2.57	1.242
Average Mean		**2.9**	

Source: Researcher Survey (2025)

Table 1 above shows the waste management practices across universities in Ogun State. Avoiding single-use plastics has the highest mean score of 4.06 (SD=1.093), indicating its widespread adoption. Landfills follow with a mean score of 3.79(SD=1.129), while dumping waste by roadside or flowing rivers has a mean score of 3.59 (SD=1.200). Recycling (1.64; SD=1.220), waste segregation (1.78; SD=1.221), and waste burning (2.57; SD=1.242) are less prevalent. The overall average of 2.9 suggests that universities are practising some positive waste management measures, reflecting moderate engagement.

Research Question 2: What are contributory factors responsible for poor waste management practices in TASUED ?

Table 2

Distributions of contributory factors responsible for poor waste management practices in TASUED

Items	N	Mean	SD
Insufficient knowledge on proper waste management practices	5001	4.22	1.220
Proritisation of conveniences over environmental concern	5001	4.00	.906
Inadequate designated waste bin or dumpsite	5001	3.79	.968
Inaccessible recycling agents	5001	3.74	1.08
Unrewarding incentives from recycling agents	5001	3.73	1.104
Inadequate students space for waste segregation	5001	3.87	.969
Time constraints for careful and constant waste disposition	5001	3.48	1.209
Lack of clear policies and regulations governing waste management practices on campus	5001	3.50	1.196
Students cultural background	5001	3.92	1.007
Average Mean		**3.41**	

Source: Researcher Survey (2025)

Table 2 reveals several contributory factors responsible for poor waste management practices in TASUED, Ijagun, Ogun State. However, insufficient knowledge of proper waste management has the highest mean score of 4.22 (SD=.857), followed by prioritising convenience over environmental concerns and students' cultural background, with mean scores of 3.92 (SD=1.007) and 3.92 (SD=1.007), respectively. The average Mean of 3.41 indicates that factors such as insufficient knowledge of proper waste management, prioritisation of convenience over environmental concerns, and students' cultural background significantly affect positive waste management practices at TASUED, Ogun State.

Research Question Three: To what extent do advocacy and awareness shape positive waste management practices at TASUED, Ijagun, Ogun state?

Table 3

Distributions on the extent to which advocacy and awareness shape positive waste management practices at TASUED, Ijagun, Ogun State

Items	N	Mean	SD
Understanding the essence of positive waste management practices	5001	3.42	1.427
Understanding of the various waste management methods and practices	5001	3.37	1.453
Understanding the adverse effects of each of the waste management methods and practices	5001	2.71	1.532
Attitudinal habits about waste management	5001	3.33	1.337
Encouraging collective action towards positive waste management practices	5001	3.59	1.443
Partnership with waste management agencies or NGO's towards ensuring waste management practices	5001	3.31	1.372
Working with institution staff to model positive waste management practices	5001	3.48	1.346
Guiding fellow students on positive waste management practices	5001	4.17	1.150
Average Mean		**3.42**	

Source: Researcher Survey (2025)

Table 3 shows various ways and means through which awareness and advocacy shapes positive waste management practices in TASUED, Ijagun, Ogun State. However, the zeal to guide fellow students on positive waste management practices has the highest mean score of 4.17 (SD=1.150), followed by encouraging collective actions towards positive waste management practices with 3.59 (SD=1.150) and working with the institution staff to model positive waste management practices 3.48 (SD=1.346). The average Mean of 3.42 showed that advocacy and awareness shape positive waste management practices at TASUED, Ijagun, Ogun State.

Research Question Four: Which of the following factors do you consider a threat to your intention to embrace positive waste management practices, after the advocacy and awareness program?

Table 4

Distribution Table on potential threats militating against students' intention to embrace positive waste management practices, after the advocacy and awareness program

Items	N	Frequency	Percentage
Inaccessible recycling agents	5001	1893	37.4 %
Unrewarding incentives from recycling agents	5001	737	14.6 %
Inadequate designated waste bins/dumpsites	5001	1476	29.2 %
Inaccessible garbage collectors	5001	473	9.4 %
Inadequate space for waste segregation	5001	306	6.1 %
Time constraint for careful and constant waste disposition	5001	116	2.32 %

Total	**5001**	**100%**

Source: Researcher Survey (2025)

Table 4 reveals potential threats to students' intention to embrace positive waste management practices after the advocacy and awareness program. It was shown that 1893 (37.4%) considered inaccessible recycling agents to be one of the significant threats, followed by inadequate designated waste bins/dumpsites, which were considered by 1476 (29.2%) of the respondents as threats, and unrewarding incentives from recycling agents, by 737(14.6%) of the respondents. Other factors, such as inaccessible garbage collectors, inadequate space for waste segregation, and time constraints for careful and constant waste disposal, were reported by 306 (6.1%), 116 (2.32%), and 116 (2.32%) respondents, respectively. The data revealed that, despite the significant impact of the advocacy and awareness programmes, certain factors continue to pose a threat to students' intention to adopt positive waste management practices at TASUED.

Discussion and Findings

The findings of study question one indicated that students employed several waste management techniques, predominantly including the avoidance of single-use plastics, utilisation of landfills, and the disposal of rubbish along roadways and in flowing rivers. The findings substantiate the assertions of Abo-Khalil (2024), El-Halwagy (2024), Ojuri, Olowoselu, Akinrele, Ayodele, and Jayejeje (2024), as well as Debrah, Teye, and Dinis (2022), who contend that university students in Nigeria and other developing countries have not adequately adopted sustainable waste management practices, including recycling and waste segregation, in their daily routines.The results of study question two indicated that multiple reasons contribute to inadequate waste management procedures at TASUED.

However, inadequate understanding of effective waste management procedures, the preference for convenience above environmental considerations, and students' cultural origins are significant contributors. These findings corroborated the assertions of Adeniyi and Ajagbe (2025); Ezeudu and Chukwudubem (2023); and Bhawal Mukherji, Sekiyama, Mino, and Chaturvedi (2016), who contend that a substantial correlation exists among knowledge of waste management techniques, attitudinal disposition, socio-cultural influences, and effective and sustainable waste management practices. This suggests that some students are either unaware of effective waste management techniques, intentionally practise inadequate waste management, or display attitudes influenced by their familial background or cultural views.

Moreover, the third research question indicated that knowledge and advocacy have markedly enhanced positive waste management habits among TASUED students. It has notably heightened their enthusiasm to assist peers in embracing effective waste management techniques, fostered collaborative efforts in this regard, and invigorated their aspiration to aid institutional staff in exemplifying these practices. The findings support the assumptions of the Knowledge, Attitude, Practice (KAP) model and the environmental education-awareness paradigm, which highlight enhanced human knowledge and increased public education as beneficial factors and solutions for waste management strategies (Ahmad & Ismail, 2015; Thapa, 2021).

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to assist peers in embracing effective waste management techniques, fostered collaborative efforts towards these initiatives, and ignited their aspiration to aid institutional staff in exemplifying such practices. The results substantiate the hypothesis of the Knowledge, Attitude, Practice (KAP) framework and the environmental education-awareness paradigm, which posits that sustainable waste management practices depend on heightened public awareness and human knowledge (Ahmad & Ismail, 2015; Thapa, 2021). Likewise, it substantiates the conclusions of earlier research conducted by Eneji, Edung, Effiong, and Okon (2019); Ifegbesan, Ogunyemi, and Rampedi (2017), which have highlighted the necessity for ongoing awareness initiatives to promote sustainable waste management practices at Nigeria's higher institutions.

The fourth research question reveals that students are prepared to adopt positive waste management practices; however, their intentions are hindered by various factors, including inaccessible recycling agents, insufficient designated waste bins or dumpsites, unmotivating incentives from recycling agents, unavailable garbage collectors, limited space for waste segregation, and time limitations for diligent and consistent waste disposal. The results corroborate the rational choice theory in waste management, which asserts that individuals make decisions based on perceived advantages and disadvantages. This method encourages practices like recycling by highlighting favourable results (Yin & Ma, 2022; Onuorah, Helen, & Ekwe, 2023). It also corroborates the conclusions of prior research that has highlighted the need of waste management infrastructure for effective sustainable management practices (Ayoko, Peter, & Jegede, 2023; Shaibu & Anisulowo, 2025).

Conclusion and Recommendations

The research indicated that awareness initiatives and advocacy substantially improve positive waste management behaviours among students at Tai Solarin University of Education, Ijagun, Ogun State, Nigeria. Notwithstanding its considerable influence, the study determines that various factors, including inaccessible recycling agents, insufficient designated waste bins/dumpsites, unmotivating incentives from recycling agents, unavailable garbage collectors, inadequate space for waste segregation, and time limitations for meticulous and consistent waste disposal, continue to hinder students' willingness to adopt effective waste management practices in the school. Consequently, the study proposes the following recommendations: Establishment of a centre for environmental conservation and renewable energy. The centre will enable the transformation of renewable waste into textiles, cleaning agents, and personal care items, while its facilities will guarantee sustainable trash disposal and produce revenue for on-campus waste management. It will also enable research, seminars, symposiums, rallies, and advocacy initiatives that promote sustainable waste management techniques.

It is imperative for the institution and student reps to engage sustainable waste management companies that utilise technological gadgets to transform garbage into currency or tangible goods for users on school campuses and in hostels. This will mitigate the impact of inaccessible recycling resources and inadequate recycling incentives that have deterred students from adopting recycling, a beneficial waste management strategy. Likewise, it will function as an incentive, motivating students to properly segregate their garbage, meticulously store it, and willingly dispose of it sustainably in return for monetary or material rewards.

iii. To rectify the deficiency in waste

management infrastructure and insufficient waste disposal facilities, the institution should implement a public-private collaboration. The institution must establish a "Sustainable Waste Management Trust Fund" (SWMTF) to solicit monetary or in-kind contributions from business entities, non-governmental organisations, philanthropists, and prominent individuals. The document additionally advocates for the placement of a signpost and a visual inscription at a pivotal site adjacent to waste management facilities. This will enhance students' awareness regarding the correct disposal of waste and refuse on campus. Collaboration between school management and student representatives is essential to promote awareness, establish effective communication, and facilitate positive waste management practices on university campuses.

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Conflict of interest

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