



# Assessment of Maintenance Strategies for Environmental Aesthetics of recreational Open Spaces in Abeokuta Nigeria.

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## ABSTRACT

The planning and management of landscape development requires a thorough and systematic approach to avoid negative consequences such as low patronage. The low interest in recreation can be a result of poor management and lack of proper maintenance of recreation sites. Some prominent factors emerged as important influences upon participants deciding whether or not to go to a recreational park in Nigeria. They include amongst others; activities provided in the recreational spaces, the presence of a natural environment, and park maintenance. It is noted that the more understanding of why people prefer to go to certain places, the more effective will be the role of designers, landscape architects, and managers of these places. In managing both the physical environment to evoke aesthetic pleasure and satisfaction the positive effect of stress and crime reduction through recreational engagement can be assured. Quantitative descriptive analysis was used in analysing the response to the primary data questionnaire distribution within Abeokuta North and south local Governments of Ogun State of Nigeria. The study investigated the impact of management strategies and concludes that it can enhance environmental aesthetics quality, capable of encouraging a larger influx of visitors and users to the ROS sites.

**Key Words:** Aesthetics, Architecture, Environment, Maintenance, Management, Open space Recreation

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## I. INTRODUCTION

The apparent low patronage of recreational open spaces (ROS) in Abeokuta even on public holidays, underscores the need to assess the perception index of (ROS) infrastructure in the city. Akamagune (2015) noted that the negligence of adequate planning and development of recreational facilities in Nigeria is a huge setback to cities achieving maximum utilisation in their social, economic, physical and environmental sectors. This with many other managerial problems in maintaining the few available ones; has led to gradual decay of the nation's recreational areas and consequently reduce their benefit to the built environment. This sordid state of the recreational open spaces has consequently affected their effective patronage.

Jacobsen (2008) noted that parks in neighborhoods that are generally utilized are successful and well arranged. Akamagune (2015), further observed that the structures (Building) surrounding the Olumorock are very old and have lost their beauty. Developing areas where people observe beauty in a spirit of contemplation may indeed be one of the highest forms of recreation. Beauty is inherent in an environment where people can breathe clean air, swim, or fish in clean, unpolluted lakes and streams. There is brazen violation of land use plan when recreational open spaces are poorly maintained or managed. Apart from cultural recreational environments having unpleasant looks, some designs and planning practice in the built environment retains a disastrous trend (Turner, 1996).

There is an increased demand of land from the public for the various human activities. This has led to open spaces being misused by being converted illegally for other uses like refuse dumps, corner shops, mechanic workshops, residential buildings, squatter homes and other uses other than that which it was initially developed (Alabi, 2010). It could become a security problem to people around such open spaces as criminals and wild animals perceive it to be a hideout. According to Ayatamuno, (2010), the inadequate ordination of physical planning activities within cities has resulted in the unpleasant and unattractive quality of open spaces.

The aesthetic value of parks and recreation areas cannot be overstated. Aesthetics is also inherent where urban populations can enjoy the greenery and open space. This aesthetic or beauty should be available and accessible to people as long as access does not destroy the natural resource. When recreation areas and facilities are developed, some damage to the natural environment is bound to take place. Vandalism, littering, solid waste disposal, compaction, destruction of vegetation, overcrowding, water pollution, and soil erosion are all issues that must be addressed.

Town Planning generally involves the ordering of land uses, siting of buildings, and communication routes in order to secure a maximum level of economy, convenience, and beauty, according to Keeble (1969). This emphasis unconditionally unveils the fact that there is a wide variety of elements that make up the human community and define its quality of life. Greed, (2005) stated that these elements are possibly not limited to employment opportunities, the supply of quality housing, or cultural and social opportunities but extend to the quality of natural environments that often come through open spaces, parks, and recreational planning

## **II. STATEMENT OF THE RESEARCH PROBLEM**

There is an increase in the demand for higher levels of development by urbanization in developing countries like Nigeria which Daramola and Ibem (2010) observed, has sponsored to a large extent the ineffective use of open spaces. The available ones have been overtaken by un-organised and haphazard planning resulting from weak development control (Olotuah&Bobadoye). The majority of private developers are involved in the illegal development of their buildings. Arigbola, (2008) noted that they build without relevant approval from authority and hardly measure up to the stipulated statutory regulations while developing their lands. This has defeated the management plan, design, and landscaping.

The consequence of poor management of recreational open spaces is low patronage and in some extreme cases; conversion of such ROS to mechanic workshop and other land uses. There is lack of harmony in carrying out individual and cooperate task in planning, development and protection. Most Nigerian cities are poorly organised in terms of physical planning and, hence, characterised by inadequate open spaces. Good management can mitigate most of these concerns.

### **AIM AND OBJECTIVES**

This research assessed the stakeholders' maintenance strategy of ROS in Abeokuta Nigeria with the view of enhancing its patronage. The specific objective is to propose a framework for the maintenance strategies of ROS

### **JUSTIFICATION FOR THE STUDY**

The research focus was informed by poor management of recreational open spaces in Abeokuta Nigeria, as is common in most developing countries, particularly in the traditional cities where the value attached to such use has been eroded. Previous studies have identified the benefits of engaging in recreational activities to include the promotion of healthy living; encouragement of social interaction; increased productivity; prevention of crimes and anti-social behaviours and enhancement of the economic base of the society among others (Brown, 2000; Moroukola, 2003; Obi-Ademola, 2008)

Agwu and Obialor's (2012) investigation of open space in Umuahia and Aba (Southeast Nigeria) noted that due to rapid urbanization, the condition of the two cities has become worse both physically and functionally. This problem may as well be described as a national phenomenon. They had earlier come to the conclusion that the higher the rate of urbanization in the place (resulting in overcrowding), the greater the deficiency of open spaces.

Officha, Onwuemesi, and Akanwa, (2012) carried out a study and discovered that in recent times, open spaces have become a prominent feature in physical planning and development. The study asserts that there is a need to establish open spaces and recreational centres in Nigerian cities, since, they have a marked effect on many aspects of the quality of the urban environment and the richness of life in a city. Elements of good management related to environmental protection include: Good land use planning and careful allocation of resources or most appropriate use based on the ability of the resource to absorb that use must be considered. There is persistence in the call to establish ROS in cities but the critical examination of environmental aesthetics-related management strategy is not considered which this study intends to assess.

### **STUDY AREA**

The orthogenetic city of Abeokuta, capital of Ogun state Nigeria as shown in Figure 1, is the study area which comprises of two local governments namely: Abeokuta North and Abeokuta.south located in south western part of Nigeria as shown in figure 2 below. It occupies an area of 100 square kilometres with an estimated population of about 593,100. (NPC, 2007).

The area lies within the rainforest belt of the tropics, between latitudes  $7^{\circ} 51'$  and  $07^{\circ} 20'$  N and longitude  $030^{\circ} 17'$  and  $030^{\circ} 27'$  E. (Onakomaiya, 2000). The altitude ranges from 120 to 180 metres above sea



### **Management of Recreational areas and Facilities**

Several schools of thought have defined Management in different ways but no single definition is accepted as superior and final. According to Officha, Onuemesi, and Akanwa, (2012). Management is concerned with efficiency in the conversion of opportunity and resources into wealth. It is a vital aspect of realisation of set goals and objectives of any organisation, institution, or government, especially in the case of those in charge of the development of open spaces and it is the pre-design stage of the park planning process for the effectiveness of the recreational area. Akpala (1992) confirms that management refers to people and also the process by which people do things.

Management comprises those who guide actions in organisation towards the achievement of the ends or goals for which the organisation is established. However, it is observed that inadequate recreational opportunity could be made productive with good administration, but that the best result could not be achieved without it. Allsopp (1979), define management as the selection of goals and the planning, procurement, organization, coordination and control of the necessary resources for achievement. It is concerned with the dynamite of circumstance and activity as it is generally motivated by the need to economize in the use of resource and the time in activating predetermined objectives.

In the third world (the developing countries) such as Nigeria there is lack of awareness of the contribution that leisure-time activities can make to the quality of life of urban residents and visitors, hence, Akintola-Arika, (1985), posited that the issue of providing recreational facilities is not taken seriously by urban planners and public official. This situation is diametrically opposed to what obtains in more developed countries such as the U.S.A., and Britain where the provision of recreational facilities has long been made a routine component of plans for urban cities and the society at large.

Raymond & Associates, (2002), conducted a survey of recreation needs and attitudes in Corpus Christi and reported that 84 percent of the city residents reported having visited a city park or park facility, while 72 percent reported visiting a city playground. Maintenance management method serves to protect the owners of real estate investment and oversee the work carried out to preserve the asset in order to enable its continued use and function above a minimum acceptable level of performance. (Real Estate Foundation of Information bulletin 2010).

In the views of Ezennia; Uwajeh and Irouke (2017), most successful parks are judged successful not only as a result of its design but also because of management. This is not only about picking garbage and cutting the grass. But that most important and additional part of park management is how to integrate the community as partners and stakeholders of the ROS. This will ensure safety and protection of the infrastructure. Proper management whether recreational or otherwise is centered around some key objective. The proper management of these facilities will surely fulfill the purpose of these facilities. Facilities management (FM) is based on the premises that the efficiency of any organization is linked to the physical environment in which it operates and that the environment can be improved to increase efficiency (Grimshaw & Keeffe, 1993).

Standards are indirectly set by the users of the facility. The opinions of park planners and users may vary greatly. An essential indicator of the success ratings of a park is determined by the level of patronage it receives and the way it is used. Planning and maintaining recreational open spaces is critical to achieving and maintaining a high quality of life for residents. The recreational environment and its aesthetic attribute can act as a relief to physical and psychological distress of its city inhabitants.

### **The Physical Environment and Aesthetics**

The physical environment has great influence on patronage. The photograph shown in plate 11.1, is a typical example of the scene of a roving car on a patchy floor which may develop into bumps that could discourage picnic and visitors from patronising the facility. On the other hand, a largely paved recreational open space should be provided with street furniture for the elderly or weary persons to sit down. Plate 11.2 showing Olugbade memorial park does not depict any seating space for such category of persons and this could be one possible reasons for dissatisfaction. Provision of enough facilities can encourage recreational participation and improved patronage.

The management strategy of recreational open spaces is to understand the aesthetic construct and perception of the users in order to maintain a sustainable recreational environment. A well-articulated ROS maintenance and management will ensure public response and patronage. The environmental aesthetic factors and the users' perception should be a guide in the continual maintenance and management of the facilities already provided. With the increasing low rates of participation by adults in ROS, focus is on providing open space for informal recreational use closely to where people live, to blend with public access to play fields.



**Plate 11.1** Patchy floor of ROS at Olusegun Obasanjo Library (OOPL) Abeokuta

Source: Researcher's Field Survey, (2021)



**Plate 11.2** Lack of seats at Olugbada memorial Park Abeokuta

Source: Researcher's Field Survey, (2021)



**Plate 11.3** Poorly maintained floor at the olumorock recreation site

Source: Researcher's Field Survey, (2021)

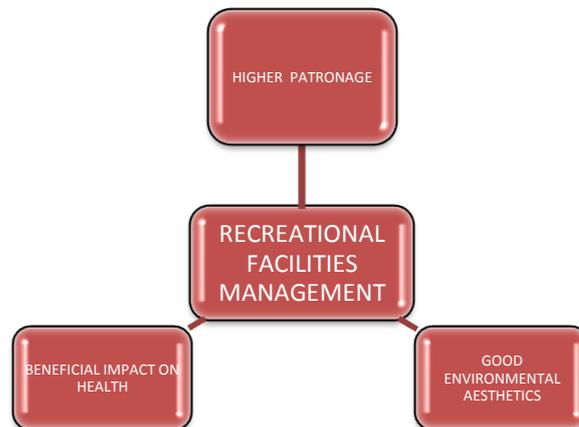


**Plate 4.0** Uneven floor surface can lead to accidental fall of visitor (children) at the site

Source: Researcher's Field Survey, (2021)

Some Nigerian cities namely: Lagos, Benin and Abuja- FCT were assessed for the quality of maintenance tools and equipment used which described the level of affluence and type/level of patronage enjoyed by respondents. Olusola (2020), identified equipment in common use for maintenance as sophisticated grade equipment which included riding mower, sprinkler, and hedge trimmer, the mid/medium grade equipment included bush cutter and pruning shear, while simple grade equipment includes the use of cutlass, secateurs and hoe. However, majority of the cities were landscaped for aesthetics purposes to lift up the standard of the cities and to make the cities attractive for visitors/tourists.

Most places landscaped were mostly public places owned by governments, which included institutions, conference centres, parks and amusement centres. The sizes of landscaped area were between 1 ha-10 ha of land space in most of the cities



**Fig 3.0 Conceptual Model Showing the Effects of good Environmental Management**

Source: Researcher’s Field Survey, (2021)

### III. RESEARCH METHODOLOGY

Creswell (2012) defined research method as a process of identifying problem and mechanism for data collection on Variables which are investigated with a view to proffer solutions. Kothari (2009) described Research Methodology as the concept of conducting a research or a study. This is also referred to as the conceptual structure within which research or study is conducted (Kothari, 2009). It provides basic procedure for data collection, measurement and its analysis to solving research problem(s). Asika (1991), simply noted it as, the structuring of investigation to identifying variables and their relationships. This section provides the procedural framework within which the research was carried out. It includes the research design, research population, sampling frame, sample size, etc.

#### Research Design

The quantitative method of research was adopted in the Assessment of maintenance strategy of environmental aesthetic quality in recreational open spaces in Abeokuta Nigeria. Landscape elements aesthetic features questionnaire was given to respondents at the recreation site.

#### Research Population

Parahoo (1997), defines research population as the total number of units from which data can be collected, such as individuals, artefacts, events or organizations. The population for this study was from three major groups. First group comprises Leisure seekers, tourist sports participants and spectators at the research site. Selected by simple random sampling and by every third contact covering the two local government areas of Abeokuta North and South.

#### Sampling frame

The sampling frame is a list of elements from which a sample is selected. The sampling frame is done through the probability method of census sampling and for an unbiased and justified research into the relationship between ROS and maintenance strategies. Specifically, the sampling frame consisted of all leisure seekers and visitors to the site.

#### Sample Size

The sample size is drawn from the sampling frame based on the respondents/visitors to the ROS site in the two local Government area of Abeokuta as shown in table 1.0, in order to assess its impact on the visual aesthetics of Abeokuta. The focus of the study is on the human population who have a relationship or are stakeholders to the research that is, sampling the view of each individual which is a representative of the whole. The sample size (n) is calculated from the overall population of the two Local Government Area. The use of Recreational Open Space Questionnaires was administered to visitors and others who engage in commercial activities within the study area.

Table 1.0 showing Abeokuta Local Government Area (Nigerian Population Census of 2006)

LOCAL GOVT AREA	POPULATION CENSUS 2006
Abeokuta South	250,295
Abeokuta North	498,793

TOTAL 749,088

Wi 4.3 % growth rate to 2019 = 1,294,879.285

Further to calculating the sample size for this study, the statistical formula for selecting sample from a finite population as propounded by Yamane (1967) was applied.

The result and the interpretation of the primary data, collected through the distribution of questionnaires that follows the research methodology is presented in this section. The target number of questionnaires expected to be filled was 400 questionnaires. Response from the questionnaires is drawn from various parts of Abeokuta. Table 2.0 shows the recreational facilities in Abeokuta open to members of the public. These are locations where the questionnaires were distributed.

**Table 2.0 Recreational open spaces (ROS) in Abeokuta**

S/N	Name of ROS	Locational Address	Geographical Location	Component	Owners hip
1	<b>Olumo Rock - Olumo</b>	Ogun state min. of culture and tourism, oke -mosan,	Abeokuta North.	Museum, restaurants, water fountain	Public
2	<b>MoshoodAbiola Stadium</b>	Kuto, Abeokuta, Ogun State, Nigeria	Abeokuta North.	Bar, Recreation and musical entertainment	Public
3	<b>Funfactory</b>	MoshoodAbiolaStadiu m,KutoAbeokuta,, Nigeria	Abeokuta North.	facilities include toys, games, bouncy castles, train rides, carousels, swimming pools	Private
4	<b>Emerald Amusement Park</b>	22 Former Savanah Bank Premises, Quarry Road, Ibara, Abeokuta	Abeokuta North.	Amusement Park recreation center located at Ibara.	Private
5	<b>University of Agriculture</b>	Abeokuta-Ibadan road in the North Eastern end of the city, 15 km from Abeokuta City Centre	Abeokuta North.	Open Spaces with Trees and Street Furniture	Public
6	<b>Green legacy resort</b>	Olusegun Obasanjo Presidential Library Complex, NNPC Bus Stop, OkeMosan	Abeokuta North.	4 star hotel, an amusement park, adire and african fabrics centre, a pent house restaurant, an artificial lake with boat ride	Private
7	<b>Golf Resort</b>	located at Golf Resort Drive, Off IBB Drive, OkeMosan, Abeokuta, Ogun	Abeokuta North.	They have a 4.5 kilometer course comprising four par three, four par five and 10 par four holes.	Public
8	<b>Centenary hall</b>		Abeokuta North.		
9	<b>Akin Olugbade social centre</b>		Abeokuta North.		
10	<b>Arakanga nature reserve</b>		Abeokuta North.		
11	<b>Cultural and Arts Centre</b>	3, Ibara, Roundabout, Abeokuta;	Abeokuta North.	houses a swimming pool, convention center, an amusement park, and a cinemas	Public
12	<b>MoshoodAbiola University</b>	The Ojere campus Abeokuta	Abeokuta South	Open Spaces with Trees and Street Furniture	Public

Source: Researcher's Field Survey, (2021)

Due to missing questionnaires, incomplete cases and data access challenges only 372 questionnaires were filled completely and correctly. Therefore, all questionnaires which contain missing values are deleted. As shown in Table 4.1, 93.0% of the questionnaires are adequate for data analysis and made an inference on Abeokuta. The questionnaires were analysed using both descriptive and inferential statistics. The inferential was used to make a general inference where necessary. The questionnaires are, however, analysed using SPSS 23.

#### IV. FINDINGS AND DISCUSSION

##### Socio-demographic Characteristics of the Respondents

The Socio demographic data of the respondents is presented in Table 3.0 comprised of variables which include sex, age, level of education, marital status and income. For the gender of the respondents, 56.5% of the

respondents are female and 43.5% of the respondents are male. This shows that a larger percentage of the respondents who use recreational open spaces in Abeokuta are female. For the age of the respondents, the result shows that the age group between 20 - 29 years visit the recreational open space in Abeokuta than any of this age-group of 18 – 20 years (23.4%); 30 – 39 years (21.2%); 40 – 49 years (11.3%); 50 years and above (5.1%) and no respondents for < 18 years.

The study investigated the educational status of the respondents to determine their educational levels. It shows that majority of the respondents are having an ordinary national diploma (OND) with a frequency and percentage distribution of 155 (41.7%) out of the total respondents of 372. (37.4%) of the respondents are having HND/BSC; 11.3% are having master's degree and above; 9.1% of the respondents are having secondary schools and 0.5% of the respondents are having primary school leaving certificates.

Meanwhile, out of the 372 respondents, 61.8% of them are single, 36.6% are married, 1.1% are either divorced or separated and 0.5% are either widow or widower. To investigate further on the environmental aesthetics of the recreational open spaces in Abeokuta, the income level of the respondents shows that 23.4% of the respondents earn < 10,000 naira per month; 22.3% earn above 51,000 naira; 16.9% earn 31,000 – 40,000 naira per month; 16.4% of the respondents earn between 10,000 – 20,000 naira; 14.0% of the respondents earn between 21,000 – 30,000 naira and 7% of the respondents earn between 41,000 – 50,000 naira. This shows that the majority of people who visit the recreational open spaces in Abeokuta are earning less than 10,000 naira per month.

**Table 3.0: Socio-demographic Characteristics of Respondents**

Variables N=372	Frequency Distribution	Percentage Distribution
<b>Sex</b>		
Female	210	56.5
Male	162	43.5
<b>Age of the respondents</b>		
< 18 years	0	0.0
18 – 20 years	87	23.4
20 – 29 years	145	39.0
30 – 39 years	79	21.2
40 – 49 years	42	11.3
50 years and above	19	5.1
<b>Educational Level</b>		
Primary school	2	0.5
Secondary school	34	9.1
OND	155	41.7
HND / BSC	139	37.4
Master's degree and above	42	11.3
<b>Marital Status</b>		
Single	230	61.8
Married	136	36.6
Divorce / separated	4	1.1
Widow/Widower	2	0.5
<b>Income</b>		
< 10,000	87	23.4
10,000 – 20,000	61	16.4
21,000 – 30,000	52	14.0
31,000 – 40,000	63	16.9
41,000 – 50,000	26	7.0
Above 51,000	83	22.3

Source: Researcher's Field Survey, (2021)

### **Maintenance Strategy and Environmental Aesthetics quality of ROS**

This section is divided into two-part. The first part uses descriptive statistics which include frequency distribution, percentage distribution, weighted mean score, standard deviation and rank. The other part "Kendall tau correlation" is used to test the hypothesis which determines the relationship between the maintenance strategies and environmental aesthetics quality of ROS.

#### **Descriptive statistics on the maintenance strategy.**

Descriptive statistics are regarded as a preliminary analysis used to determine the number of respondents from each of the variables. The analysis is carried out using frequency and percentage distribution, weighted mean score and standard deviation. These are used to determine the level of agreement of each of the respondents.

As shown in Table 4.0, Publicity and public enlightenment about the ROS can affect patronage is ranked the highest among the 17 variables being rated the highest frequency and percentage distribution of 144 (38.7 %). considered with the weighted mean value of 4.240 and the standard deviation of 0. 874. Staff morale can

affect ROS patronage is ranked the second variables being rated “Agreed” by 138 (37.1 %). with the weighted mean score of 4.154 and a standard deviation of 0.935 The third is “ROS maintenance and sanitation is regular” “Agreed” by 165 (44.4 %) having a (4.084wms, ±0.960STD) being rated The least of all the seventeen (17) variables is “Staff receive regular incentives to be more productive” being rated "Uncertain" by 128 (34.4 %) with a (3.668wms, ±0.952STD) This proves that if the management of the ROS in Abeokuta work on public advertisement and the populace are enlightened about the ROS in Abeokuta, the level of patronage would increase. Also, it is deduced that the staff of the ROS could not be ascertained whether if they receive regular incentives, they would be more productive or not.

Other variables include the dwindling economy has affected the management of ROS being rated “Agreed” by 137 (36.8 %); having a (4.078wms, ±0.869STD) Regular staff training can influence patronage being rated “Agreed” by 136 (36.6 %); with a (4.074wms, ±0.975STD) Adverts about the ROS is scanty being rated “Agreed” by 169 (45.4 %); having a (4.068wms, ±0.835STD) The maintenance strategy of the ROS should be retained being rated “Agreed” by 145 (39.1 %); with a (4.013wms, ±0.955STD) The location of ROS affects its management being rated “Agreed” by 138 (37.1 %); having a (3.982wms, ±0.960STD) Some of the maintenance is outsourced being rated “Agreed” by 129 (34.6 %); with a (3.962wms, ±0.941STD) Cost of management affect the aesthetic quality of ROS being rated “Agreed” by 139 (37.4 %); having a (3.944wms, ±0.953STD). Government Policy has no effect on management of ROS being rated “Agreed” by 128 (34.4 %); with a (3.943wms, ±0.971STD) The management of the ROS has performed very well being rated “Agreed” by 135 (36.2 %) having a (3.921wms; ±1.009STD); ROS managed by Government is preferable) being rated “Agreed” by 126 (33.9 %); with a (3.921wms; ±1.074STD. Security challenges have no effect on the ROS management being rated “Agreed” by 128 (34.5 %); having a (3.912wms, ±1.039STD)

Management of ROS has no effect on its aesthetic quality being rated “Agreed” by 122 (32.7 %), with a (3.880wms, ±0.984STD) and ROS maintenance and sanitation is in house being rated “Agreed” by 148 (39.8 %). having a (3.836wms, ±0.954STD).

**Table 4.0: Maintenance Strategy of ROS**

Maintenance Strategy	Frequency and Percentage Distribution					Weighted Mean Score		
	STD	D	U	A	SA	Statistic	Std. dev	Rank
ROS managed by Government is preferable	38 (10.2)	67 (18.0)	53 (14.2)	126 (33.9)	88 (23.7)	3.921	1.074	13
ROS maintenance and sanitation is regular	45 (12.1)	34 (9.1)	32 (8.6)	165 (44.4)	96 (25.8)	4.084	0.960	3
ROS maintenance and sanitation is in house	39 (10.5)	33 (8.9)	90 (24.2)	148 (39.8)	62 (16.6)	3.836	0.954	16
Some of the maintenance is outsourced	13 (3.5)	43 (11.6)	97 (26.1)	129 (34.6)	90 (24.2)	3.962	0.941	9
The management of the ROS has performed very well	42 (11.3)	39 (10.5)	75 (20.2)	135 (36.2)	81 (21.8)	3.921	1.009	12
Adverts about the ROS is scanty	9 (2.4)	30 (8.1)	72 (19.4)	169 (45.4)	92 (24.7)	4.068	0.835	6
Staff receive regular incentives to be more productive	14 (3.8)	62 (16.7)	128 (34.4)	116 (31.2)	52 (13.9)	3.668	0.952	17
Staff morale can affect ROS patronage	21 (5.6)	40 (10.8)	53 (14.2)	138 (37.1)	120 (32.3)	4.154	0.935	2
Publicity and public enlightenment about the ROS can affect patronage	22 (5.9)	23 (6.2)	51 (13.7)	144 (38.7)	132 (35.5)	4.240	0.874	1
Regular staff training can influence patronage	25 (6.7)	47 (12.6)	57 (15.3)	136 (36.6)	107 (28.8)	4.074	0.975	5
The maintenance strategy of the ROS should be retained	17 (4.5)	54 (14.4)	62 (16.6)	145 (39.1)	94 (25.4)	4.013	0.955	7
The dwindling economy has affected the management of ROS	8 (2.2)	24 (6.5)	98 (26.2)	137 (36.8)	105 (28.2)	4.078	0.869	4
The location of ROS affects its management	12 (3.2)	58 (15.6)	72 (19.4)	138 (37.1)	92 (24.7)	3.982	0.960	8
Cost of management affect the aesthetic quality of ROS	11 (3.0)	58 (15.6)	79 (21.2)	139 (37.4)	85 (22.8)	3.944	0.953	10
Government Policy has no effect on management of ROS	12 (3.2)	57 (15.3)	86 (23.1)	128 (34.4)	89 (23.9)	3.943	0.971	11
Management of ROS has no effect on its aesthetic quality	16 (4.3)	56 (15.1)	97 (26.1)	122 (32.7)	81 (21.8)	3.880	0.984	15
Security challenges have no effect on the ROS management	32 (8.6)	61 (16.4)	66 (17.7)	128 (34.5)	85 (22.8)	3.912	1.039	14

Where STD indicates strongly disagreed, D – disagreed, U – uncertain, A – Agreed, SA – Strongly Agreed.

Source: Researcher’s Field Survey, (2021)

**Correlation between the maintenance strategies and the environmental aesthetic quality of ROS**

The result in Table 5.0 shows a strong positive relationship between the maintenance strategies and the environmental aesthetic quality of ROS with the correlation coefficient ( $\tau = 0.643$ ). This proves that as maintenance strategies increases, the environmental aesthetic quality of ROS increases. If the management continues to strategies, there would be an improvement in the quality of environmental aesthetic.

**Test of Hypothesis**

H<sub>0</sub> (Null Hypothesis): There is no significant relationship between maintenance strategies and the environmental aesthetic quality of ROS.

Meanwhile, the hypothesis is tested at a 5% level of significance, approximately 95% confidence interval. The result of the analysis shows that the null hypothesis should be rejected which implies that there is a significant relationship between maintenance strategies and the environmental aesthetic quality of ROS at P-value = 0.043. This proves that the maintenance strategies have an impact on the environmental aesthetics quality of ROS.

Table 5.0 Kendall’s tau correlation between the maintenance strategies and the environmental aesthetic quality of ROS

Variables	Correlation Coefficient	P-value	Remarks
maintenance Strategies and environmental aesthetics quality of ROS	0.643	0.043	Significant

Source: Researcher’s Field Survey, (2021)

**V. CONCLUSION AND RECOMMENDATION**

The result on the maintenance strategies and the environmental aesthetic quality of ROS proves that as maintenance strategies increases, the environmental aesthetic quality of ROS increases. If the management continues to strategies, there would be an improvement in the quality of environmental aestheticssince the maintenance strategies have an impact on the environmental aesthetics quality of ROS. Managers can attract attention to the ROS not only by regular maintenance but also through adequate publicity. Some form of entertainment can be introduced at the ROS to create fun and make the site lively. Parkmanagers must ensure the protection of the natural resource during the design and construction phase, when areas for intensive recreation use are developed.

Appropriateness of development is a value judgment which may be the most difficult of all management decisions. The use of good design and appropriate materials can help any facility blend into the natural landscape. The park and recreation professional should help create natural beauty where none now exists. Formal gardens, attractively kept parkland, well-landscaped and maintained roads and streets, and aesthetically designed play areas provide an opportunity to increase the quality of life for everyone. Opportunities must also be provided for the urban dweller to experience the natural environment by maintaining access to large natural areas. When a park and recreation agency develops and adheres to high standards of maintenance, it has taken an important step towards possible planning strategic actions to the various stakeholders and government for possible implementation virtual space (e.g. Facebook, Twitter, etc.) could be useful in organizing social rallies but the real gathering begins with the assembly of individuals in the public open space.

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