Users' Evaluation Of Public Parks' Quality And Utilization Pattern: A Comparative Study In South-Western Nigeria

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Abstract*— *Neighbourhood public parks are the natural environment of rural areas for users' leisure, recreation, psychological and physical comfort. Fewer studies have explored the users' perception, utilization pattern, and quality of public parks in Nigeria. Hence, this empirical study explores the quality of neighbourhood public parks in two rural areas in South-west, Nigeria. Users' perception and utilization patterns were studied through appropriate documentation of the influence of the physical and spatial qualities of public parks. The 200 quantitative data were collected through the use of survey questionnaires at Ikogosi cold and warm spring in Ekiti state and Olumirin waterfalls, Erin-Ijesa, South-west, Nigeria. The study's findings established through descriptive and regression analyses of SPSS software suggest: [1] the tourists' perceptions on environmental sustainability on Ikogosi and Olumirin parks do not vary significantly among the tourists of diverse age groups, gender, education, length of residency, and frequency of utilization [2] the recreationist' patronage/character and well-being do not vary significantly at the two recreational parks, while significant values were seen at the two parks in response to quality/aesthetics and maintenance /cleanliness respectively. [3] Parks' quality and aesthetics, maintenance, and cleanliness, as well as safety, have shown to be significant predictors of the tourists' utilization patterns. It is recommended that both the physical and the spatial qualities of the public parks studied needed further improvement to enhance the tourists' needs and expectations. Aspects of parks' maintenance, safety, and quality are recommended to be considered in future planning, management, and design. This paper contributes to filling the knowledge gap in areas of human and environmental relationships towards promoting parks' environmental sustainability in Nigeria.

Keywords— Public Park, Parks' quality, Environmental sustainability, Tourists' utilization pattern, Nigeria

I. INTRODUCTION

Parks as part of the rural landscape features function as passive and active recreation, environmental benefits, and wildlife habitat providers (1, 2, 3, 4). In other words, park status could be a natural or semi-natural state and is set aside for human enjoyment as well as for the protection of wildlife or natural habitats. The ownership and maintenance of the park might be by the individual or local government. While features of the park usually consist of rocks, soil, water, flora and fauna, and grass areas, it may also contain buildings and other artifacts such as playgrounds.

Recently, Public Park has become an area of interest among urban designers and researchers worldwide and thus remains an important feature of the physical rural environment. As part of the physical environment, Public Park is meant for all leisure seekers that require no entry or exit restriction. In this regard, (4), affirmed that public park hosts people of diverse gender, race, and age. Public park areas are significant settings for the enhancement of physical activities. These are areas among the most widely recognized for active work (5). Parks are accessible in many networks, are normally allowed to get to, can serve different populaces including low-income and minority gatherings, and their arrangement can be impacted by local strategies (6). In this way, improving admittance to parks and streamlining their plan appears to be encouraging techniques to increase physical activities.

Tourism is a veritable tool to promote socio-economic development worldwide. Nature tourism has achieved a great feat in international tourism. Recently, there exists an upsurge in the number of tourist's sorting for where they can have absolute peace, a connection with nature, and other hosts of sports or recreational activities (7, 8). Local economic development concerning the maintenance of the bio-physical environment remains the paramount focus of

tourism worldwide. Meanwhile, nature tourism has been affirmed as a driver that could improve the development of rural areas and a natural environment for biological value.

Recent urban development's drives are not only concerned about planning and design of buildings and activities, but it equally involves creating functional public spaces that can have a positive impact on the users. Hence, it could be stated that public park functions as a direct influence on residents and visitors' social activities. The typologies of parks vary in size, form, and functions, while at the same time; it could be categorized into hierarchies of the neighbourhood, district, and regional park space (9). Common features of public parks include playgrounds, gardens, hiking, paths ways, sports fields and courts, and public restrooms depending on the budget and natural features.

Appraisal of the quality impact of the park in the community depends on the rate of recreationists' accessibility. However, the quality of the public park environment can be adjudged through the levels of user satisfaction. At the same time, the users' judgment of the quality of Public Park, encircled the degree of the facilities and amenities provided coupled with the standard of maintenance (10, 11, 12). The good quality public spaces enhance the rural environmental quality (13). Notably, Public Park with good quality facilities and amenities attract users' accessibility. Literature has presented a host of numerous health benefits associated with access to public parks. For instance, access to parks has been associated with better perceived general health (14), (15), reduced stress levels (16, 17); reduced depression (18), and encourage walking (19, 20). Moreover, there is a substantial body of evidence demonstrating that increased walking improves physical and mental health (21,22, 23, 24).

Recently, Public parks are often underdeveloped and at risk of being undervalued in neighborhood planning. The purpose of this present study is to compare, explore the quality of Public Parks through users' perception and utilization pattern of two parks in South-west, Nigeria. The aim of this study will be reached through the following objectives: (i) finding the relationship of environmental sustainability of the Ikogusi and Olumirin parks with users' demographics backgrounds, (ii) establishment of the relationship between the various items of users' perceptions in the Ikogusi and Olumirin parks, (iii) to explore the effect of Parks' Quality on Utilization pattern. Hence, a strategic assessment will identify a need to rationalize existing park space to overcome past planning mistakes and to address access and maintenance issues.

II. Issues and Statement of Problem

Aside from the benefits derived from parks generally, (25), noted that the lack of comparative study on the interrelationships in assessing the quality of public parks is attributed to difficulties in defining, measuring, and assessing the quality of a park. Similarly, (26) and (27) asserts that the current sustainable park indicator should take into cognizance the availability of public spaces. Public parks have been proven to fulfill the needs and expectations for the satisfaction of residents living environment which leads to a sustainable neighborhood. Ikogosi and Olumirin parks are tourist attraction centers having a common uniqueness of features known as "waterfalls".

Therefore, the two parks have long become a visiting recreation center for residents and tourists across the globe. The two parks have been adjudged to be avenues and good environments to recreate, meeting friends and visitors. Thus, there is a need to investigate the parks' qualities and utilization patterns among the recreationists as a precursor to the establishment of concrete evidence towards the functional Public Park, social participation, and neighborhood growth.

III. LITERATURE REVIEWS

*A. **P**arks' History, **D**esign, and **L**ocation*

The first parks were deer parks, land set aside for hunting by royalty and the aristocracy in medieval times. They had walls or thick hedges around them to keep game in and people out. These game preserves evolved into landscaped parks set around mansions and country houses from the sixteenth century onwards. An aesthetic of landscape design began in these stately home parks where the natural landscape was enhanced by landscape architects such as Capability Brown. As cities became crowded, the private hunting grounds became places for the public. With the Industrial revolution, parks took on a new meaning as areas set aside to preserve a sense of nature in the cities and towns.

The level of utilization of the park is typically reflected in the structure and design of the park. Therefore, the park's structure and design determine the affordance opportunities for human use (28), (29), (30), (31). For instance, a change in recreational demands could bring about changes in the design of parks such as the construction of more facilities for active recreation (32). Park design could be influenced by the intended purpose and the available land features. For instance, a park intended to cater to children's recreation could also include a playground. While at the other hand, a park primarily intended for adults might incorporate features for walking paths. The design, operation, and maintenance of Public Park is usually done by the government, typically on the local level, but may occasionally involve the private sector.

A neighborhood park should be centrally located, if possible, within its service area and should be uninterrupted by physical barriers. It should be accessible by public transportation, or low-volume residential streets. Primarily it serves residents residing within about 1/4 mile of the park, without physical or social barriers to the boundaries (33).

Ease of access from the surrounding neighborhood and central location is a key concern when selecting a new park site. The site should allow active and passive recreational purposes. As the primary aim of Visiting Park is to experience a pleasant outdoor environment, the site should exhibit some innate aesthetic qualities.

B. Parks' Sustainability and Development

Environmental sustainability is under threat, with accelerating growth in global greenhouse gas emissions and biodiversity loss. The report of the World Commission on Environment and Development (the Brundtland Commission) entitled Our Common Future (1987), had defined sustainable development as the process that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987). The concept inherent in this definition led to two versions of sustainability: "strong sustainability", which does not allow sustainability between natural capital and produced capital (either physical or human), and "weak sustainability", which allows such sustainability.

Investigations revealed what the recreation center's qualities do mean for the spatial and usage of park space by the people (34). Additionally, the examination inferred that nearby local parks, play a critical effect on the sustainability of the city. In this vein, the ability of a city to function as a place of relaxation and opportunity is often determined by various factors, which include the environmental condition of such a place. Urban planners in the 21st century have been focusing on the concept of green city and green culture has an integral part of a functional, sustainable, clean, and healthy city. Thus, the challenges of the fast-growing cities will be to steer urbanization from its current, unsustainable path towards sustainable and greener cities that offer their inhabitants choice, opportunity, and hope (35). Therefore, the concept of the green city becomes a sustainable city planning.

The concept of "green cities", designed for resilience, self-reliance, and social, economic, and environmental sustainability usually associated with urban planning in more developed countries. It has been suggested that the building of a "green" city is equivalent to the building of sustainability (36). Many countries are planning and engaged in building green cities and "eco-cities" as starting points for the building of sustainable development. Yet, it is important to understand cities' sustainability as a broader concept which integrates social development, economic development, and environmental management. This refers to the management and investment decisions taken by municipal authorities following national authorities and institutions. The 1987 report of the World Commission on Environment and Development, also known as the Brundtland Commission, defined sustainable development as develop¬ment that meets the needs of the present, without compromising the ability of future genera¬tions to meet their own needs. The report included a chapter on urban issues. In the Year 1991, the United Nations Centre for Human Settlements (UNCHS) Sustainable Cities Programme attempted to define a sustainable city as where "achievements in social, economic and physical development are made to last" United Nations Human Settlements Programme (37).

Rural development is critical for an integrated approach to sustainability and for reducing poverty. Ensuring wider and inclusive access to public services can reduce rural/urban inequalities, disaster risk, and food insecurity, as well as strengthen net¬works between cities and villages. The need for the park has increased to commensurate the demand for more green areas, natural recreation, retreat, and recreational activities (38). Hence, an upsurge in the governmental plan towards preventive measures to mitigate the negative effect of environmental degradation through intensified conservation efforts. Recently, efforts by the Nigerian Government have been geared towards environmental impact assessment (EIA), and strategic environmental assessment (SEA), in a bid to mitigate environmental impacts of developmental projects. Therefore, the Government of the day has backed the private sector initiative to provide leisure and other recreational facilities across the major capital cities of Nigeria.

C. Roles and Functions of Public Parks

Public parks' major roles include the provision of recreational opportunities and encouragement of users' healthier lifestyles (39). Other functional roles of Public Park according to (40), (41), (42),and (43) include the followings: [i] preservation of essential natural artifact, [ii] protection of the local flora and maintenance of parks' ecological functions and services, [iii] enhancement of neighborhoods' aesthetics, [iv] the economic benefit of public park could better increase the property value the real estate market, [v] attractions centers for tourists, and business men and women, (vi) public park could improve users' health through reduction on the stress via walking, [vii] parks' trees and vegetation could help militate against global warming by reducing the amount of greenhouse gases in the atmosphere, [viii] well-maintained parks promote community engagement and residents' social interactions among individuals of all ages and ethnic backgrounds, [ix] accessibility to parks could improves the users' quality of life, [x] Parks helps improves rural socio- economic activities and improve tourism potentials of an area, [xi] preservation of wildlife, and natural environment of parks could improve the environmental quality of the region, (xii) empirical research has revealed the parks' potential in promoting childhood physical activity and reductions in the prevalence of childhood obesity.

IV. DESCRIPTION OF THE STUDY SITES

Aside from the benefits derived from parks generally, (25), The first study area is a town called Ikogosi in Ekiti State, South-west, Nigeria (see Figure 1) hosted the Public Park that has its uniqueness of

uncommon features known as “cold and warm” springs meeting at a natural V-shaped spot. Ikogosi spring water has long become a visiting recreation park for

residents, tourists/visitors across the globe. The small town of Ikogosi-Ekiti in Ekiti State in Western Nigeria is situated between lofty, steep-sided, and heavily wooded, north-south trending hills about 27.4 km East of Ilesha (Osun State), and about 10.5 km Southeast of Effon Alaye (Ekiti State). It is located just north of the 7o 35'N latitude and slightly west of the 5o 00' E longitude. There are a rainy season (April–October) and the dry season (November–March). Temperature ranges between 21° and 28°C with high humidity. The Southwesterly wind and the northeast trade winds blow in the rainy and dry (Harmattan) seasons respectively. The tropical forest exists in the south, while the savannah occupies the northern peripheries.

The Ikogosi spring resort is one of the beauties of Nigeria in terms of natural endowment (see Figure 2). The water runs down a hilly landscape where the warm springs form a confluence with other cold springs from adjoining hills and merge into one continuous flowing stream at 70 degrees. Located in the western part of Nigeria, known as Ekiti state, Ikogosi is a small community in terms of size and population. Ikogosi has a good local natural environment combined with rich culture and history, and these form the basis of what makes the community a tourist destination (44).

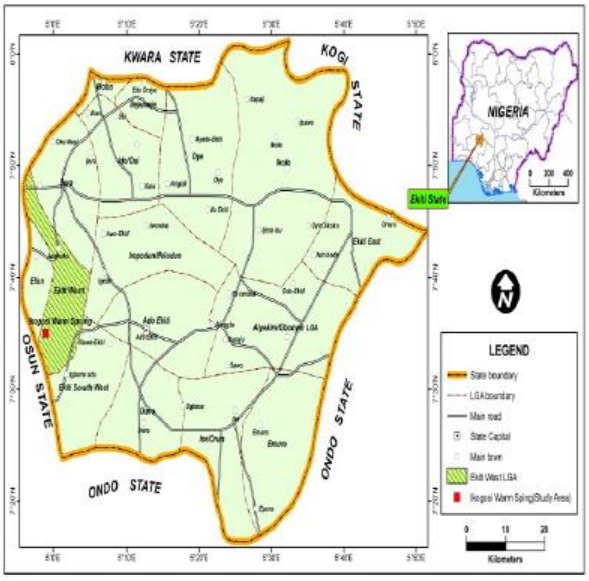

Figure 1: Location Map of Ikogosi Park Source: (45)

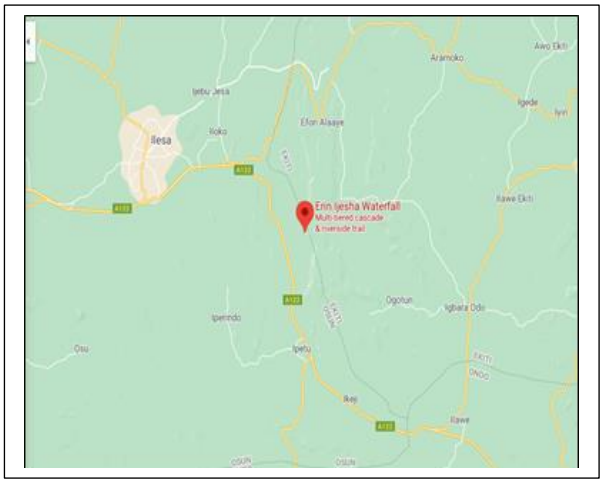

Figure 2: Erin Ijesha Waterfall. Source: (46)

However, it is an awesome site where two different springs flow side by side without disturbing each other: while one is cold, the other is warm and they maintain a temperature of about 38 degrees. The measurement of the whole area of the spring is about 32 hectares and it is prevented from erosion by tall evergreen trees in which these trees form a cover for relaxation of the tourists. Apart from being a resort for relaxation, it also serves as a cure for some diseases in the body. Figure 3 depicted pictures of the nature of Ikogosi warm and cold resort. Erin Ijesha (Olumirin) in Oriade local government is a seven-step waterfall in Osun State, South-west, Nigeria.

The waterfall in Figure 4 is a whole new exciting and awe-inspiring experience with nature. The waterfall is 2km from Erin Ijesha town. According to one of the custodians of the waterfall, it was discovered by a woman called Akinla, founder of Erin-Ijesha town and a granddaughter of Oduduwa, the progenitor of the Yoruba race. This was traceable to the year 1140 AD during the migration of Ife people to Erin- Ijesa. Each step of the waterfall has a flowing fountain that marks the mystical nature of the place. The waterfall is a stunning assemblage of seven unique levels, with each level providing a whole new outlook when compared to the previous level. The waterfall exudes a therapeutic ambiance produced by nature.

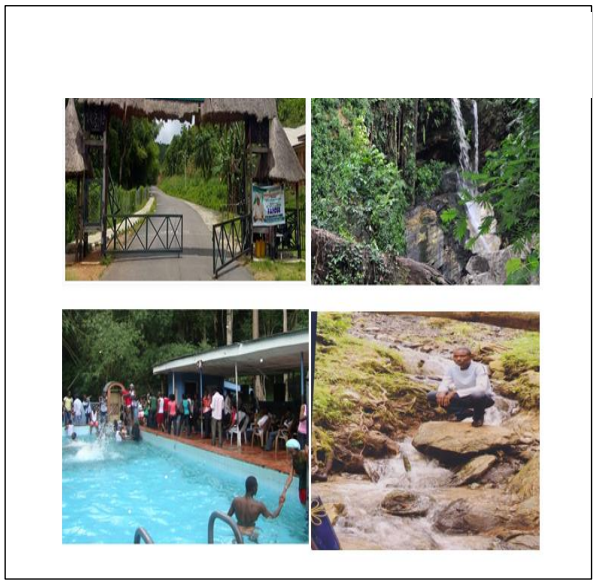

Figure 3: Pictorial views of Ikogosi waterfall in Ekiti State, Nigeria.
Source: Researchers'' fieldwork, (2017)

Figure 4: Pictorial views of Erin Ijesa (Olumirin) falls, Osun state, Nigeria.
Source: Researchers' fieldwork, (2017)

V RESEARCH METHODOLOGY

The scope of the study is to investigate recreationists' perceptions of public parks quality, and their utilization pattern while visiting the Ikogosi and Olumirin parks. In this research there are three domains used, they are: (i) Respondents' demographic characteristics and their impacts on the parks' sustainability (ii) various items of users' perceptions and utilization patterns, and (iii) parks' quality. Respondents' demographical characteristics are expected to determine their perceptions of the parks' sustainability as positive feelings and beneficial services. This will further enhance and contributes to the quality of life and the users' utilization in diverse ways. This study applies a quantitative research design which is an experimental research design to achieve the desired research aim and objectives.

Self-administered questionnaires were initiated by asking the respondents to complete the questionnaire themselves. For data collection, the distribution of survey questionnaire was conducted in the morning, afternoon, and evening for a total number of four weekends at the case study sites. In other words, distributions took place between Saturday, November 4, 2017, and Sunday, 26th November 2017 by using a simple random sampling method. One hundred and twenty (120) questionnaires were distributed to the tourists available at each of the Ikogosi, and Olumirin parks, totaling two hundred and forty (240) questionnaires distributed in all. Out of the 240 questionnaires administered for the users/ tourists, only 200 were retrieved and suitable for data analysis.

The contents of the survey questionnaires incorporated three (3) sections, namely: (i) the perception about the relationship between respondents' characteristics and parks' sustainability items (iii) respondents' perceptual variables at the two parks, and (iii) respondents' views on parks' quality and utilization patterns. Meanwhile, respondents' responses were measured and rated on a five-point Likert scale ranging from "1" for strongly disagree, "2" for disagree, "3" for neutral, "4" for agree and "5" for strongly agreed.

VI RESULS AND DISCUSSION

The Cronbach's alpha of the total variables stood at 0.75. This statistic measures internal consistency reliability, which is the degree to which responses are consistent across the items within a measure. The relationships of environmental sustainability of the Ikogosi and Olumirin parks with demographical backgrounds are presented in Table 1. The results of the ANOVA indicated that the sustainability of Ikogosi and Olumirin parks do not vary significantly among the tourists of diverse age groups (Ikogosi, p=0.33; Olumirin, p=0.36). These indicated that users of all age-groups are inclined towards the sustainability of the two parks. For the mean values scores, any positive values above 1 are considered to concur and of a positive response by the respondents. Meanwhile, any negative values below 1 are considered otherwise. The highest mean values of m=1.28 and m=2.42 were recorded by the respondents aged between 12 years and 30 years at the two parks. Both genders (male and female) respondents equally shown a positive response, while the highest mean value of m=1.23 and m=2.44 were exhibited by the female respondents. Perceptions of parks' sustainability are established to be higher with the Bachelor / 1st degree and post Graduate respondents in both parks. This is an

indication that knowledgeable respondents are more inclined to the parks' sustainability. Similarly, length of residency (Ikogosi, p=0.32; Olumirin, p=0.84) and frequency of utilization are determinants of tourists' perception of the sustainability of the two parks (Ikogosi, p=0.63; Olumirin, p=0.54). However, a significant difference was observed among the tourists' time of visiting the parks (Ikogosi, p=0.04; Olumirin, p=0.02), occupations (Ikogosi, p=0.03; Olumirin, p=0.04), and duration of staying at the park (Ikogosi, p=0.04; Olumirin, p=0.02).

Table 1: Relationship of respondents' demographical backgrounds and environmental sustainability of the Ikogusi and Olumirin parks (n-200)

	Sustainability of Ikogosi Park			Sustainability of Olumirin Park		
Respondents' demographical backgrounds	Mean	Standard Deviation (SD)	P	Mean	Standard Deviation (SD)	P
Age (Years)						
12 years – 30 years	1.28	0.64	0.33	2.42	0.83	0.36
31 years and above	1.20	0.41		2.24	0.72	
Gender						
Male	1.16	0.24	0.29	2.31	0.71	0.34
Female	1.23	0.61		2.44	0.75	
Education						
No education	1.06	0.24	0.35	2.99	1.00	0.08
High school	1.15	0.42		3.00	1.10	
Bachelor / 1st Degree	1.16	0.45		3.02	1.14	
Postgraduate and above	1.26	0.55		3.24	1.26	
Length of Residency						
1-3 years	1.12	0.41	0.32	3.21	1.16	0.84
4-6 years	1.06	0.12		3.31	1.22	
7- 10 years	1.08	0.29		3.18	1.40	
11 years above	1.20	0.59		3.19	1.08	
Frequency of Utilization						
Very often	2.17	0.72	0.63	1.36	0.86	0.54
Often	2.33	0.70		1.14	0.42	
Sometimes	2.43	0.82		1.06	0.20	
Rarely	2.51	0.74		1.16	0.24	
Time of Visiting park						
Morning (6am - 12 noon	2.16	0.64	0.04*	2.12	0.58	0.02*
Afternoon (12 noon – 4 pm	2.35	0.72		2.33	0.70	
Evening (4 pm – 7pm	2.14	0.61		2.10	0.52	
Respondents' Occupations						
Government employed	3.31	1.02	0.03*	2.40	0.62	0.04*
Self employed	3.30	1.16		2.41	0.70	
Not employed	3.16	1.18		2.33	0.81	
Retired	3.12	1.18		2.22	0.80	
Students	3.39	1.20		2.43	0.89	
Others	3.12	1.15		2.24	0.82	
Respondents' Duration of stay in the park						
Less 15-minutes	2.00	0.60	0.04*	2.19	0.51	0.02*
15 minutes – 30 minutes	2.11	0.61		2.20	0.61	
30 minutes – 1 hour	2.18	0.64		2.18	0.66	
1 hr and above	2.35	0.75		2.36	0.75	

Significance level ≤0.05

Results indicate that tourists' that visit the park in the afternoon (12noon to 4 pm) have the highest perception of the park sustainability (mean value = 2.35) at Ikogosi park; which is significantly different from the recreationists that visit at the other periods of the day. The least perception of sustainability was reported by the tourists that visit in the evening (mean value=2.14) at Ikogosi park.

Same perceptions were observed at Olumirin Park, where significant differences were observed by tourists' occupations and duration of stay on the sustainability of the two parks. The highest perception of the park sustainability was observed by the students at both parks (Ikogosi park, mean=3.39; Olumirin park, mean= 2.43); which is significantly different from other tourists of diverse occupations. The highest perceptions of the park's sustainability were observed by the tourists that stayed more than an hour at the two parks. (Ikogosi park, mean=2.35; Olumirin park, mean= 2.36); which is significantly different from other tourists that stay at different times of the day.

Analysis of variance (ANOVA) is conducted to ascertain the difference in users' perception of the two parks of the neighborhoods. To examine the relationships among the five perceptual variables of tourists' patronage and character, tourists' well-being, quality/aesthetics of the parks, and quality/aesthetics of the parks; a one-way ANOVA was conducted. The results of the ANOVA in Table 2 and Figure 5 indicated that the tourists' patronage/character in the Ikogosi park (m=4.15, Sd=0.41), and Olumirin park (m=4.12, Sd=0.45) does not vary significantly at the two recreational parks with p=0.61 and p=0.81 respectively.

In view of this, it could be established that tourists' were inclined towards patronizing the parks that subsequently impacts positively on their character. The highest mean value (m=4.15) was reported by the tourists in the Ikogosi park. Similarly, non-significant values of p≥0.05 were shown by the respondents at both parks in respect to their well-being during their visitations. This is an indication that both tourists at the two parks attest to the fact that as they visit the parks and positive impacts were observed on their well-being at the end of their visits (Ikogosi park, p≥0.31; Olumirin, p≥0.21).

Table 2: Relationship among the various items of users' perceptions in the Ikogusi and Olumirin parks (n-200)

		Ikogosi Park				Olumirin Park		
Respondents' perceptual Variables	Mean	Standard Deviation (SD)	F	P	Mean	Standard Deviation (SD)	F	P
Recreationists' patronage and character	4.15	0.41	1.04	0.61	4.12	0.45	1.88	0.81
Recreationists' well-beings	3.54	0.73	1.67	0.31	2.48	0.31	1.57	0.21
Quality / Aesthetics of the parks	1.55	0.46	7.56	0.03*	1.74	0.63	6.88	0.02*
Quality / Aesthetics of the parks	1.54	0.54	6.44	0.01*	1.64	0.52	5.99	0.01*

Significance level ≤0.05

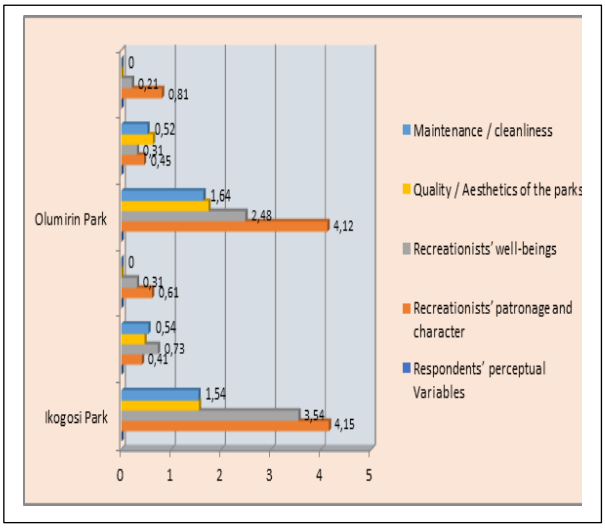

Figure 5: Relationship among the various items of users' perceptions in the Ikogusi and Olumirin parks (n-200)

While considering the quality/aesthetics of the parks, there was a significant difference p≤0.05 in the respondents' perception at the two parks (Ikogosi, p≤0.03; Olumirin, p≤0.02). The results imply that improvements are needed towards increasing the quality of the parks. However, the highest mean value (m=1.74) was recorded at Olumirin park, indicating higher attention is required in this park while compared with the Ikogosi park. In respect to the maintenance/cleanliness of the two parks, significant differences were also observed. This indicates that adequate attentions are required towards improving the quality/aesthetics and maintenance/cleanliness of the two parks. However, the highest mean was observed at Olumirin park (m=1.64) revealing much attention is solicited at this particular park while compared with Ikogosi park.

The result in Table 3 revealed the regression analysis indicating that as the parks' quality increases, so also the parks' utilization increases. Parks' quality and aesthetics, maintenance, and cleanliness, as well as safety, have shown to be significant predictors of the tourists' utilization patterns. The overall dimensions of parks' quality as predictors of the utilization pattern established a significant model of p≤0.05 level in which 18.2% of the variance is explained by the model.

Table 3: Effect of Parks' Quality on respondents' Utilization pattern (n-200)

Dimensions of Parks' Quality (predictor variables)	B	Beta	P value	R^2 value	Adjusted R^2	F value
Landscaping (S1)	0.26	0.14	0.32	0.250	0.182	23.15
Quality / Aesthetics (S2)	0.21	0.19	0.01*			
Maintenance / Cleanliness (S3)	0.32	0.35	0.04*			
Safety (S4)	0.34	0.33	0.03*			
Constant	0.30					

Significance level≤0.05. The regression equation: Y = 0.26 X S1+ 0.21 X S2 + 0.32 X S3+ 0.34 X S4+ 0.30

VII. CONCLUSION AND RECOMMENDATION

The findings of this research are believed to add substantially to the body of knowledge in the areas of parks' quality and sustainability especially to the rural dwellers and the tourists. The perceptions of users are regarded as a key factor in the development of sustainable tourism (47,48,49,50). Appropriate design, planning, and management of the park as a tourist attractions centers were reinstated in this study in a bid to enhance parks' accessibility and utilization as well as tourists' experiences. Both the residents and the tourists play a critical role in parks' perceptions, utilizations, and maintenance, depending on their socio-demographic features, cultural, and social backgrounds (51). In the same vein, the socio-demographic characteristics of users affect the appraisal of the parks' sustainability levels and sharing capability as outdoor spaces. Besides, public parks' provision and quality are tailored towards the creation of a safe, aesthetic, and comfortable rural environment.

This research has affirmed that the public park's attractiveness or aesthetics could also promote users' frequent utilization. In other words, the quality of a public park is determined by the degree of the facilities and amenities provided coupled with the standard of maintenance. It could be stated that an unalloyed relationship exists between the parks' maintenance, facilities, and amenities and that of the parks' quality. Meanwhile, the size and nature of activities initiated in public parks respond to the users' sense of judgment in terms of the quality. This finding concurs with the study of (52) which suggests that the physical quality of the park remains sacrosanct and should be considered. Similarly, the availability of adequate security and safety in the parks influence the users' perception relating to the quality and rate of accessibility. Sustainability depends on how much of the natural environment such as parks can be conserved, maintained, and appreciated (53,54,55).

Based on this study's findings, the following are recommended:

(i) The planning, development, or redevelopment of the two parks in rural communities should be given special attention. This will further reduce the adverse effects of climate change, global warming, and Green House Gas (GHG).

(ii) Adequate improvements in the two existing parks will not only save the neighboring communities from environmental problems but also enriches users' health and well-being.

(iii) There is a need for advocacy on the parks' promotion and awareness. The influx of recreationists and tourists alike could improve the economic viability status of the rural dwellers.

(iv) Good accessibility and provisions of essential facilities could promote effective utilization of the two public parks in the rural communities. Hence, the patronage of these public parks is subjective to the users' financial capability and these need to be properly considered when fixing the price for the parks' user

(v) There is a need for proper investment in the provisions of essential amenities, and facilities in the two public parks. Hence, the mental, emotional, and therapeutic benefits of the two parks could be more appreciated fully.

(vi) Both the State and Local Government needs to adopt public-private partnership initiatives in parks' management to enhance and bring about adequate facility maintenance in Nigeria. Through this, proper maintenance of the existing parks could be achieved

(vii) The two parks and others across the country need to be upgraded up to the global standard. Hence, inadequate facilities such as the cafeteria, power supply (electricity and generator), and security could be improved.

REFERENCES

[1] W. D. Soleckiav, J. M. Welchb, Urban Parks: Green Spaces or Green Walls? *Landscape and Urban Planning,* 32. 93-106, 1995.

[2] G. Cranz, Changing Roles Of Urban Parks: From Pleasure Garden To Open Space. Landscape 22 (3):9-18. 1978.

[3] G. Cranz, The Politics of Park Design, Cambridge, Massachusetts: MIT Press. 1982

[4] J. Gehl, & L. Gemozoe, New City Spaces (Copenhagen: The Danish Architectural Press). 2001.

[5] B. Giles-Corti, R.J. Donovan, The relative influence of individual, social and physical environment determinants of physical activity. Soc Sci Med, 54:1793–1812. 2002.

[6] G.C. Godbey, L. L. Caldwell, M. Floyd, & L. Payne, Contributions of leisure studies and recreation and park management research to the active living agenda. American Journal of Preventive Medicine, 28 (2 Suppl 2), 150–158. 2005.

[7] J. Bell, A. Stockdale, Evolving National Park Models: The Emergence of an Economic Imperative and Its Effect on the Contested Nature of the "national" Park Concept in Northern Ireland. Land Use Policy, 49, 213–226. 2015.

[8] P.F.J Eagles, S. F. Mccool, C. D. Haynes, Sustainable Tourism in Protected Areas: Guidelines for Planning and Management; IUCN, Ed.; UICN: Gland, Switzerland, 2002.

[9] S.Thompson, Design for Open Space Factsheet", Your Development. www.yourdevelopment.org. 2008.

[10] M. Carmona, T. Heath, T. Oc, S. Tiesdell, Public Spaces - Urban Spaces: The Dimension of Urban Design. Architectural Press. London. 2008.

[11] C.W.Thompson, Urban open space in the 21st century. Landsc. Urban Plan. 60, 59–72. 2002.

[12] S. M. Low, The Erosion Of Public Space And The Public Realm: Paranoia, Surveillance And Privatization in New York City. Journal of City and Society, 18 (1), 43–49. 2006.

[13] L. Bertolini, & M. Djist, Mobility Environments and Network Cities. Journal of Urban Design, 8(1), 27–43. 2003.

[14] S. De Vries, R. Verheij, P. Groenewegen, and P. Spreeuwenberg, 'Natural Environments - Healthy Environments? An Exploratory Analysis of the Relationship between Greenspace and Health,' Environment and Planning A Vol.35 pp.1717-31. 2003.

[15] J. Maas, R. A. Verheij, P. Groenewegen, S. de Vries, and P. Spreeuwenberg, 'Green Space, Urbanity, and Health: How Strong is the Relation?' Journal of Epidemiology Community Health, Vol.60, pp.587-92. 2006.

[16] P. Grahn, & U. A. Stigdotter, Landscape Planning and Stress. Urban Forestry and Urban Greening 2 (1), 1–18. 2003.

[17] T. S. Nielsen, K. B. Hansen, 'Do Green Areas Affect Health? Results from a Danish Survey on the Use of Green Areas and Health Indicators'. Health Place Vol.13, pp.839-850. 2007.

[18] E. Morita, S. Fukuda, J. Nagano, N. Hamajima, H. Yamamoto, Y. Iwai, T. Nakashima, H. Ohira, and T. Shirakawa, 'Psychological Effects of Forest Environments on Healthy Adults: Shinrin-Yoku (Forest-Air Bathing, Walking) as a Possible Method of Stress Reduction'. Public Health, Vol.121, pp. 54-63. 2007.

[19] F. Li, R. Wang, J. Paulussen, X. Liu, Comprehensive concept planning of urban greening based on ecological principles: a case study in Beijing, China. Landscape and Urban Planning 72, 325–336. 2005.

[20] B. Giles-Corti, M. Broomhall, M. Knuiman, C. Collins, K. Douglas, K. Ng, A. Lange, and R. Donovan, 'Increasing Walking - How Important is Distance to Attractiveness and Size of Public Open Space?' American Journal of Preventive Medicine, 28, pp.169-76. 2005.

[21] L. Maleki, & M. Habibi, Evaluation of environmental quality in the urban areas (Case Study: the neighborhood Chizari). Magazine Architecture and Urban Planning. 2011.

[22] T. Fritz, P. Wandell, H. Aberg, et al, Walking for Exercise - Does Three Times per Week Influence Risk Factors In Type 2 Diabetes?' Diabetes Research and Clinical Practice Vol.71, pp.21-27. 2006.

[23] H., Wilhelm Stanis, S.A., Kaczynski, A.T. et al. Perceptions of Neighborhood Park Quality: Associations with Physical Activity and Body Mass Index. ann. behav. med. 45, 39–48 (2013). https://doi.org/10.1007/s12160-012-9448-4

[24] I. Tsuji, K. Takahashi, Y. Nishino, T. Ohkubo, S. Kuriyama, Y. Watanabe, Y. Anzai, Y., Tsubono, and S. Hisamichi, 'Impact of Walking upon Medical Care Expenditure in Japan: The Ohsaki Cohort Study'. International Journal of Epidemiology, Vol.32, pp.809-14. 2003.

[25] L. Maleki, & M. Habibi, Evaluation Of Environment Quality In The Urban Areas (Case Study: the neighborhood Chizari). Magazine Architecture and Urban Planning. (2011).

[26] A. Chiesura, The role of Urban Parks for the Sustainable City. Landscape and Urban Planning, 68(1), 129-138. 2004.

[27] A. A. Popoola, S.O. Medayese, O. M. Olaniyan, P. I. Onyemenam, & B. M. Adeleye, Users' Perception Of Urban Parks And Green Networks In Ibadan. Singaporean Journal Of Business Economics, And Management Studies Vol.4, No. 10, pp 16-30. 2016.

[28] G. Cranz, Changing roles of urban parks- from pleasure ground to open space. Landscape, 22 (3): 9-18. 1978.

[29] G. Cranz, The Politics of Park Design: A History of Urban Parks in America. The MIT Press, Cambridge, MA. 1982.

[30] S. Hardy, How Boston played a sport, recreation, and community 1865-1915. Northeastern University Press, Boston, MA. 1982.

[31] D.Schuyler, The new urban landscape: The redefinition of city form in nineteenth-century America. New studies in American intellectual and cultural history., ed. Thomas Bender. Baltimore: Johns Hopkins University Pres. 1986.

[32] Soleckiav & J. M Welchb, Soleckiav, Urban parks: green spaces or green walls? Landscape and Urban Planning 32 (1995) 93-106. 1995

[33] N. Mirsch, Part IV: Park Definitions and Development Standards, NRPA, www.cottagegrove.org/commdev/parksplan/Part%20IV. 1995.

[34] I. S. Ezennia, P. C. Uwajeh, & V. M. Irouke, User Perception Of Neighbourhood Parks And Open Spaces: A Case Of Karakol, North Cyprus. International Journal Of Scientific & Technology Research. Volume 6, Issue 08, August. ISSN 2277-8616. 2017.

[35] FAO, West Africa, in Global Forest Resources Assessment 2000. Main Report. FAO Forestry Paper 140, pp. 101–120 (Rome: FAO). 2001.

[36] T. Beatley, ed. Green Cities of Europe: Global Lessons on Green Urbanism. Washington, D.C.: Island Press. 2012.

[37] United Nations Human Settlements Programme (UN-Habitat), Sustainable Urbanisation: Achieving Agenda 21. Nairobi: UN-Habitat; London: Department for International Development. 2002.

[38] K. A. Shores, & T. S. West. Rural and Urban park visits and park-based physical activity. Preventive Medicine 50. Pp 513-517. 2010.

[39] A. Carlson, Environmental Aesthetics. The Rutledge Companion to Aesthetics, edited by Berys Gaut and Dominic M. Lopes, Routledge, London. 376pp. 2001.

[40] R.S. Ulrich, R. F., Simons, B. D. Losito, E. Fiorito, M.A. Miles, M. Zelson, Stress recovery during exposure to natural and urban environments. J. Environ. Psychol. 11, 201–230. 1991.

[41] E. G. McPherson, Trees With Benefits. American Nurseryman. 1: 34- 40. United States Golf Association (USGA). Golf Courses Benefit. 2007.

[42] S. De Vries, I., Bakker, W. Van Mechelen, and M. Hopman-Rock, Determinants of activity-friendly neighborhoods for children: results from the SPACE study, American Journal of Health Promotion, 21/4, supplement, pp.312-316. 2007.

[43] G.C. Godbey, L. L., Caldwell, M. Floyd, & L. Payne, Contributions of leisure studies and recreation and park management research to the active living agenda. American Journal of Preventive Medicine, 28(2 Suppl 2), 150–158. 2005.

[44] K. Godfrey and J. Clarke, Tourism development Handbook. London: Continuum Ltd. Getz, 2000.

[45] A. Olowookere, O. Olusayo, A.O. Ayeni, P. O. Imole, Respondent's Perception on Demographic and Socioeconomic Characteristics of Ikogosi Warm Spring for Environmental Sustainability. Sociology and Anthropology 6(1): 64-73, 2018. D.O.I. 10.13189/sa.2018.060106

[46] https://www.google.com/maps/place/Erin+Ijesha+Waterfall

[47] H.G.T. Olya, Y. Gavilyan, Configurational Models to Predict Residents' Support for Tourism Development. J. Travel. Res. 56, 893–912. 2016.

[48] H. Alipour, H. Olya, I. Forouzan, Environmental Impacts of Mass Religious Tourism: From Residents' Perspectives. Tour. Anal. 22, 167–183. 2017.

[49] H.G.T Olya, H. Alipour, Y. Gavilyan, Different Voices from Community Groups to Support Sustainable Tourism Development at Iranian World Heritage Sites: Evidence from Bisotun. J. Sustain. Tour. 26, 1728–1748. 2018.

[50] H.G.T Olya, E.K. Shahmirzdi, H. Alipour, Pro-Tourism and Anti-Tourism Community Groups at a World Heritage Site in Turkey. Curr. Issues Tour. 22, 763–785. 2017.

[51] A.C. Michalos, & P. George, Quality-of-Life Community Indicators for Parks, Recreation and Tourism Management Social Indicators Research Series. 2011.

[52]H. Javadi, European Journal of Sustainability, 5 (3), 361-370. 2016. Doi:10.14207/ejsd.2016.vsn3p361

[53] K. Park, Neighborhood Attributes Associated With Park Use: An Observational Study Using Unmanned Aerial Vehicles. Environment and Behavior, 52(5), 518–543.2020. https://doi.org/10.1177/0013916518811418

[54] D., Van Dyck, J. F. Sallis, G. Cardon, B. Deforche, M. A. Adams, C. Geremia, I. De Bourdeaudhuij, Associations of neighborhood characteristics with active park use: An observational study in two cities in the USA and Belgium. International Journal of Health Geographics, 12(1), Article 26. 2013.

[55] E. Pérez-Calderón, J. M. Prieto-Ballester, V. Miguel-Barrado, P. Milanés-Montero, Perception of Sustainability of Spanish National Parks: Public Use, Tourism and Rural Development. Sustainability, 12, 1333. 2020. https://doi.org/10.3390/su12041333