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USERS SATISFACTION INDEX FOR SUSTAINABLE RECREATIONAL OPEN SPACES IN AKURE, NIGERIA.

KEY WORDS: Recreation, Open Space, users' satisfaction, Sustainability

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ABSTRACT

Recreational open space is the outdoor open-air space involving green, grey, water and air spaces which can be used for active and/or passive recreation such as park, garden, public golf course and general open spaces. Recreational open space has been seen to be inadequate to cater for the rising demand of public recreation due to the increase in the population of people in Akure city. Many researches carried out on recreation and open spaces in the study area have indicated that abandonment, misuse, conversion, mismanagement, dilapidation, encroachment to mention a few are reasons for the inadequacies of these recreational open spaces. Amidst these challenges and threats to recreational open spaces, the study was set to look at the possible indicators for these demands in relation to the issues facing recreational open spaces. Consequently, a mix method approach involving administration of 379 questionnaires through stratified random sampling technique and case study of recreational open spaces in the study area was adopted. Hence, the study examined the factors influencing users' satisfaction and sustainability of recreational open spaces in Akure as its aim. The study revealed the relationship between the management condition, satisfaction and benefit of the provision of recreational open spaces as an insight to a healthy city and development. Findings revealed that greater number of the study population visit frequently the available recreational open spaces and would want the recreation facilities to be properly managed especially to meet their satisfaction. The paper further recommends that local and state governments should provide more recreational open spaces with the consideration of users' satisfaction for a healthy living.

1.0 INTRODUCTION

Recreational open space are land set aside for green spaces which includes parks and reserves, sports fields, and water body margins which are used for social, recreation and amenity purposes and for the protection of landscape, biodiversity and cultural heritage; the 'blue spaces' such as the region's waterways and harbours; the 'grey spaces' such as civic squares, streetscapes and transport corridors; and includes open vistas and views (Public Open Space and Recreation, POSR, 2013). Raphael (2015); Adejumo (2011), opined that open space is a system that forms the hub of natural resources that promote environmental consciousness and protect the city's eco-zone biodiversity. Meanwhile, landscape sustainability is the meeting point to preserve and conserve natural open space areas and connecting them to the landscape scales to protect biodiversity and ecosystem processes (Salem, 2016). Festus (2014) unveiled that Landscaping activities are carried out in open spaces, for recreational, activities. The human environments need to be sustained to achieve stable and comfortable outdoor environments by providing adequate functional spaces and services (Fadamiro & Atolagbe 2006).

Furthermore, Salem (2016.) revealed that communities should endeavour to be more sustainable and resource-efficient and to provide more options for recreation through open space. This is because POSR (2013), reveals that there is increasing demand for the commercial recreation use of public open space. The formation of open spaces has been changing as the conception of the neighbourhood has due to effects of cosmopolitan and urbanization processes (Wakaba, 2016). Hence, Raphael (2015) and Tomori (2010) unveils a total relegation of open space potential for recreation, relaxation and other activities into extinction and conversion to buildable space in a research findings carried out in Ibadan city and Dolphin estate in Lagos Metropolis. In Ibadan city, famous "Alalubosa Lake" which used to be a flourishing recreation centre during festive periods has gone into extinction through human interference (Raphael, 2015 and Tomori, 2010). Also, in Lagos Metropolis, Dolphin estate open

space was converted to a shopping complex and former Ikoyi park, Abule Nla park, Race course and Love garden was also converted to MUSON centre that is, Music Society of Nigeria centre (Raphael, 2015).

In addition, Several related research were carried out in Akure with driven expanding human and commercial population and which pointed vast issues involving open spaces and recreation. Some cases include conversion, abandonment, misuse; dilapidation of open space meant which poses threat to the POSR (2013) revelation on the increasing demand of commercial recreation survival. For example Ijatuyi and Ajenifujah-Abubakar (2014) based on the poor management and provision of recreational open space parks in Akure, opined the need for an in-depth study of users' needs, demands, satisfaction and preference for recreational spaces. Also, Onanuga and Attoye (2016) while investigating the alternative medium of improving the failing health condition of the aged in the urban fringes of Akure through recreation found out the inadequacies of open spaces for the increasing demand of public recreation. Aribigbola & Fatusin (2016) revealed that mismanagement, abandonment, encroachment, conversion and inadequacies are the challenges associated with recreational parks development and maintenance in Akure which has denied the city dwellers access to quality recreational facilities and has therefore reduced the liveability of the city. Moreso, despite the complications on these recreational open space, it has not undermined the increasing public desire for recreational open space which is evident from Oladeji, Oladeji and Adedapo (2014) who unveil the persistent will of the visitors of recreational open space in Akure to want to revisit over and over again. This proof has a ratio index to what the situation is with the increasing population of Akure city in relation to the visitors increasing demand. Hence, the paper assesses the provision and sustainability of landscape recreational open space in the fabrics of Akure, Ondo state Nigeria, to ascertain the validity on the implication of its users satisfaction and preference. This reveals the factors influencing the use of recreational open space (active or passive), relaxation or

other social and physical engagement as the vein and blood vessel of the city. Result from the study projects the valued need for continuous provision and development of open spaces to enhance communal wellbeing and societal safety through active recreation in sports, relaxation, social interaction and other physical exercise or activities. The paper then reveals the benefit of open space provision for public recreation

2.0 Literature

2.1 Landscaped Recreational Open Spaces and Public Recreation

According to Brown, Chikagbum, & Boyle, (2015), the Landscapes of urban open spaces can range from playing field to highly maintained environment to relatively natural landscapes. Landscaped open spaces are valued for a variety of reasons which includes aesthetics, active and passive recreational opportunities, restorative attributes, historic significance, cultural events, environmental benefits, ecological benefits, educational purposes, added economic value, and the opportunity to socialize and congregate with others. Landscaped open spaces for recreation are commonly open to public access as parks, sport ground, relaxation centres amongst others (Brown et al, 2015). The presence of high quality public spaces has a significant impact on the economic life of urban centres (Wakaba, 2016). This because, open spaces forms the precincts of the interaction between man, land and built form with social benefits, opportunities for health benefits, environmental benefits and economic benefits (Wakaba, 2016).

Most research has shown that children and other users with access to safe open and green space are more likely to be physically active and therefore, less likely to be overweight (Wakaba, 2016). Arnold (2013), revealed that open spaces come in a variety of shapes, sizes and types; serving a variety of functions including recreation to the people who use them. However, Raphael (2015), unveiled that recreation symbolize any form of physical exercise, sport, play, leisure (relaxation) or amusement capable of taking place within the immediate environment around local residential neighbourhoods or within designated areas where urban residents can expand their leisure hours or dissipate stress. Hence, Open spaces play vital roles in the well-being of individuals and improvement of community life which means open spaces should then be planned for if the future times and generations are to enjoy these benefits as well (Arnold, 2013). Furthermore, for sustainable developments of communities, open spaces should be integrated in to the overall planning provisions fully, with community participation in the provision, design and maintenance of such spaces (Arnold, 2013).

2.2 Public Open Space and Recreational Parks

Public open space is publicly-owned land such as, recreation areas with recreational facilities that are central to the delivery of sustainable communities (Open Space and Recreation 2016). The neighbourhood open space recreation is the mainstay of a community's system (Arnold, 2013). Open space provide recreational benefits within walking distance of the residences they serve especially larger area of the community hence should include more specialized recreational facilities (such as athletic fields, swimming pools or child play facilities e.g. swings) that require a larger service area (Arnold, 2013). Furthermore, land set aside for recreation is commonly referred to as "active open space," while land set aside for most other purposes is referred to as "passive open space." Passive open space often includes stream buffers, forested areas, floodplains, wetlands, areas of steep slopes, and other areas that are inappropriate for development or are of conservation concern (ROSG, 2015). The amount of open spaces for active and passive recreation must be dependent upon the proposed or anticipated densities (Khobragade 2014). Consequently, recreational

open space is the outdoor open-air space which is used principally for active and/or passive recreation use, developed either by the public or private sector, and is counted towards the open space standard of provision (Recreation, Open Space and Greening, ROSG 2015). Moreso, Parks are seen to be closer to residents within the neighbourhood since it can accommodate nearly all recreation facilities. This infer that society values parks for a multiplicity of reasons, each as unique as the individual user since park facilities serves of all ages, abilities, and economic status

Hence, recreational open space, such as parks, gardens and other green spaces has considerable health benefits, and are like used for physical activity if it is of high quality (Wakaba, 2016). Sometimes, open space recreation such as parks often suffer from chronic overuse, which contributes to the decline of the condition of the park and further burdens the already dwindling resources available for park maintenance (National Planning Commission 2014). Notwithstanding, as towns and cities increasingly compete with one another to attract investment, the presence of good parks, squares, gardens, streets and other public spaces become an important marketing tool and a vital economic lever to first attract and then retain new businesses (Wakaba, 2016). Consequently open spaces recreation such as park attracts corporate people and business to locations offering well designed and managed public spaces which in turn attract highly skilled employees and services (Wakaba, 2016 and Arnold, 2013)

3.0 The Study Area

Akure is the capital city of Ondo State and one of the traditional Yoruba towns in Nigeria and located within Ondo State in the South Western part of Nigeria. Akure comprise of Akure North L.G.A and Akure South L.G.A. which is located approximately 700 kilometers South West of Abuja, the Federal Capital of Nigeria and about 350 kilometers to Lagos the former capital of Nigeria. The study area only included Akure South L.G.A. with population of the city grew from 144,544 in 1987 to 148,880 in 1988 and 153,347 in 1989 to 157,947 in 1990 (Ondo State of Nigeria, 1990). According to National Population Census (NPC), the 1991 national population census however, put the population of Akure South L.G.A. at 239,124 and its estimated population in 2006 was 353,211. While at 2015, the city is estimated to have over 387,087 people. However, Akure South Local Government Area shown in Figure 1 has 15 district areas which are Aponnu, Gbogi, Isikan, Ijomu, Obanla, Lisa, Oda, Odopetu, Aro, Uro, Oke-Aro, Oshodi, Owode, Isolo and Imuagun.



Figure1: Map of Akure Showing Akure South Local Government Area.

Source:

Ondo State Ministry of Works, Land and Housing, Akure; 2010

4.0 METHODOLOGY

Mixed methodological approach was adopted with the primary data gotten through qualitative approach using

structured questionnaire in the study location to assess the sustainability of the recreational open space and the implication on users' satisfaction preference in the study area. The study further reviewed literatures from credible and relevant journals and other publications to have in depth knowledge for variables to support data gathering. Case study was also carried out in the study location to identify the available recreational open space within the study area as shown in Table 1. Moreover the population of the study is adopted from the NPC of 2015 to 387,087 and sample frame was restricted to adults of male and female above eighteen years of age who live and work in Akure south L.G.A whether skilled and unskilled, literate and illiterate. The illiterates were guided by explanations of the issues and content. The illiterate group was considered because they also make the possible use of the recreational open space of which their input will help to validate the result. The children and teenagers population restriction was because the study took into consideration their activities in Akure and is largely subjected to their parents' approval and supervision. The freedom to make decision by the larger children and teenage population cannot be thoroughly determined which will amount to large errors in data gathering and will affect the credibility and validity of the result. Sample size of the study was determined from Krejcie and Morgan table (1970), which considered sample size calculated from sample population within 300,000 and above and less than 400,000 to be 379 which makes the sample size for the study.

Stratified random sampling technique used in the study area restricted the study location to only 10 district area making two-third of the district population with 380 close ended Questionnaires administered in Akure South L.G.A. Only 323 of the administered questionnaire were retrieved which validate the data gathered to 85% while 57 (15%) of the questionnaire administered were not retrieved. Summarily

only 38 questionnaires (10% of the total questionnaire meant for the study) were administered in each district of Oke-Aro, Obanla, Gbogi, Ijomu, Isikan, Oda, Odopetu, Oshodi, Owode, and Isolo. Subsequently, descriptive statistics of frequency, percentages, and mean were used to process the data obtained for inferences. Chi-Square, Pearson product moment correlation (PPMC) and Linear Regression Analysis were the inferential statistical tools used to attain the objectives of the study with the aid of Statistical Package for Social Sciences (SPSS, 2015). This was used to test whether or not there will be significant relationship between the variables in the hypotheses. Hence, Chi-square analysis was used to test hypothesis H_{01} , i.e. the level of significant relationship between the demographic characteristics and factors influencing user perception with preference of recreational open space in Akure, Nigeria. While Pearson Product Moment correlation coefficient was used to test H_{02} , i.e. the level of significant relationship between factors influencing user perception with preference and Management of recreational open space in Akure, Nigeria. Furthermore, Linear Regression analysis was used to test H_{03} , i.e. the level of significant relationship between the satisfaction and benefit derived by users of recreational open space in Akure, Nigeria.

5.0 RESULT AND DISCUSSION

5.1 RESULT

Result gives a view of the situation through case study of existing recreational open space and data gotten from questionnaire administered.

All prime recreational open spaces in Akure South L.G.A. were visited to gather information on ownership, services with facilities as shown in Table 1. giving a background of the available recreational open space in the study area.

Table 1: Recreational Open Spaces In Akure

Recreation centres	Location	Activities	Ownership
Games Reserve Amusement Park	Ikota Junction Along Akure-Ijare Road, Akure	Recreation facilities covers Games, and sport for five aside astro turf football pitches, standard badminton court, air fighter, giant rolling ball, gym centre, digital basketball, event center, table tennis, video games & other outdoor games	private
Green Square Recreation Centre	16, Oba Adesida Road Ijapo playground, Ijapo Estate, Akure,	Include indoor and outdoor games, children birthday parties and more thus offers parks & event management services, mascots and mannequins and events center services.	private
M.D Park World Entertainment & Recreation Centre	Along FUTA Road, Akure, Ondo Nigeria	indoor and outdoor games, birthday parties	private
Ilula Recreation ground	Sijuade area of Akure.	basketball court, volley ball court, Billiard boards, Table Tennis, security post, and parking space gazebos for relaxation etc.	Public (Ondo state government)
Ondo State Ministry of Agric. Biological Garden and Park	along old Ado-Owo road, Akure South Local Government, close to Akure Shopping Complex, Mowasola House, St. Mathias Anglican School	Parks and garden, relaxation	Public (Ondo state government)
Wottss Gardens, Ondo State Senior Staff Club House	Alagbaka Akure along Oda road, Akure.	relaxation spot, bar, suya spot, open space etc Lawn Tennis, Table Tennis, Indoor games, Billiard Board	private Public (Ondo state government)
OndoState Secretariat Park	Alagbaka area of Akure	Passive Park service of green and viewing	Public (Ondo state government)
Oyemekun Rocks and Unity Village	Champion area of Akure	Include natural swimming pool, fresh fish pepper soup joint, table tennis, slides, Grotto café	private
Alagbaka biological park ("Abe Igi")	Alagbaka along Akure-Owo Road	Park / garden converted to mere drinking spot	Public (Ondo state government)
Afolayan Wildlife Park	Federal University of Technology, Akure	park service and wildlife gardens	Public (FUTA)
Ondo state stadium	Stadium road, bye Araromi, Akure	Sports and games	Public (Ondo state government)

FUTA sport centre	FUTA	Sports and games	Public (FUTA)
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(Source: Field survey, 2019)

5.1.2 Hypothesis findings

Chi-square association between gender and users preference of recreational open spaces in Akure indicate the p-value of (0.680) for the association is greater than the significance value (0.05). Therefore, the null hypothesis that states that there is no significant relationship ($X^2(5) > = 3.13, p = 0.680$) between gender and factors influencing user perception with preference of recreational open space in Akure, Nigeria is accepted. It is concluded that there is no enough evidence to suggest an association between gender and user's preference of recreation open spaces in the study area. Also for Chi-square association between age and users' preference of recreational open spaces in Akure, the p-value (0.006) for the association is less than the significance value (0.05). Therefore, the null hypothesis that states that there is no significant relationship ($X^2(20) > = 39.66, p = 0.006$) between age and factors influencing user perception with preference of open space recreation in Akure, Nigeria is rejected. It is concluded that there is an association between age and irrespective of user's preference of recreational open spaces in the study area. Chi-square association between level of education and users' preference of recreation open spaces in Akure, the p-value (0.934) for the association is greater than the significance value (0.05). Therefore, the null hypothesis that states that there is no significant relationship ($X^2(15) > = 7.73, p = 0.934$) between level of education and factors influencing user perception with preference of open space recreation in Akure, Nigeria is accepted. It is concluded that there is no enough evidence to suggest an association between level of education and user's preference of recreation open spaces in the study area. Chi-square association between type of employment and user's preference of recreation open spaces in Akure. The p-value (0.000) for this association is less than the significance value (0.05). Therefore, the null hypothesis that states that there is no significant relationship ($X^2(15) > = 145.6, p = 0.000$) between type of employment and factors influencing user perception with preference of open space recreation in Akure, Nigeria is rejected. It is concluded that there is there is an association between type of employment and irrespective of user's preference of recreation open spaces in the study area.

Furthermore, the correlation between the factors influencing user perception with preference and Management of recreational open space in Akure has p-value (0.001) and for the association, it is less than the significance value (0.05). Therefore, the null hypothesis that states that there is no significant relationship factor influencing users' perception with preference and Management of recreational open space in Akure, Nigeria is rejected. It is concluded that management of recreational open spaces significantly affect users' preference of these recreational open spaces in Akure. The correlation coefficient for the relationship is moderately strong and positive ($r = 0.548$). This study determined the relationship between the satisfaction and benefit derived by users of open space recreation in Akure, Nigeria using linear regression model. The model revealed that 20% of the satisfaction experienced by users of recreational open spaces in Akure can be explained by variation in the explanatory variables (benefit derived from recreational open spaces utilization) used in the linear regression model. Analysis of variance test produced an F-value of 7.73 which is significant at $p \leq 0.01$. This implies that the regression model is significant at 99% confidence level. Thus, the regression model is statistically significant in determining satisfaction by users of recreational open space in Akure, Nigeria. Hence, the null hypothesis which states that there is no significant relationship between the satisfaction and benefit derived by users of open space recreation in Akure, Nigeria is rejected. Moreso, the satisfaction of users of recreational open space in

Akure have positive coefficient, meaning that benefits derived from visiting recreational open space in Akure positively predicts satisfaction of users of recreational open space in Akure.

5.2 DISCUSSION

This study was aimed at assessing the implications of users' preference and satisfaction for the sustainability of the recreational open space in Akure, Nigeria. The characteristics of the respondents revealed that majority are male; physically active (below 50 years); highly educated; and employed. This result was similar to that reported by Ijatuyi and Ajenifujah-Abubakar (2014) about the characteristics of respondents in Akure. These findings support the conclusion made by Walker and Kiecolt (1995) who suggest that socio-economic level plays a role in influencing people to go to the park.

Recreational open space range from peoples' perception on its utilization, characteristics, and values and it include market square, green space, public space, squares and plaza, playgrounds, and community open space among others (Agboola, Hisyam and Said, 2017). From the findings of this study, majority of the respondents are aware of recreational open spaces around them and have visited at least once in the past one month. This result clear affirms the necessity of public spaces which cater to the needs of urban dwellers and the community as a whole (Abdul-Malek and Mariapan, 2009). It has been previously reported that open spaces often do not provide the activities that people prefer (Ahmad, Mariapan and Habib, 2011). Considering this, the social and physical perception that affect users' preference for recreational open spaces in Akure was assessed. It was revealed that social perception and preference for recreational open spaces is majorly dependent on age of other users, sex of other users, social class and ethnic identity. In addition, physical perception and preference for recreational open spaces is majorly dependent on available facilities, activities, physical accessibility, psychological accessibility and location and proximity. These perceptions were similar to that reported in the study of Ahmad et al. (2011) and Ijatuyi and Ajenifujah-Abubakar (2014).

The type and management of recreational open space is perceived to be active/passive and both publicly/private managed. Thus, these recreational open spaces are utilized as event grounds, games and viewing centers, sport grounds, playgrounds, green parks, gardens and so on, which serves the purpose of recreation, relaxation and pleasure. Though most of these open spaces are still functional, the quality is far from the standard. This largely limits their use because they are sometimes considered as insecure due to vandalism, crime and poor facilities. This study assessed the benefits derived from by users of open space recreational in Akure. Major perceived economic benefits of recreational open space in Akure include attraction of investors and business, boost tourism and create employment opportunities. Major environmental benefits perceived include improved wellbeing, improved air quality, conservation of natural resources and enhanced quality of life. In addition, major social benefits include communal interaction and improved societal relationship. Also, health and physical benefits include reduced mental stress, reduced risk of diseases, prolong ageing, activeness and fitness, weight loss, active good mood, development of skill base and reduce loneliness and isolation. Findings from studies by NRPA (2011), Ajenifujah-Abubakar (2014), Ikudayisi and Adegbehingbe (2017, p 110) also reported that access to parks, green space, and recreation opportunities help grow local economies by attracting businesses, improving property values, increasing tax revenues, protecting natural resources, creating jobs and

improving public health.

Satisfaction depicts the fulfilment of people's perceptual evaluation of environment either in a positive or negative manner through needs and pleasure derived (Davis et al., 2011, p 193-235). Findings obtained from this study revealed that the users of recreational open space in Akure are generally dissatisfied with the state of these open spaces. Their dissatisfaction is chiefly due to poor maintenance, inadequate facilities, poor access and connection, inadequate funding and abuse and misuse. Similar result has been reported by Agboola and Oluyinka (2019, p 75) on the perceptions of ethnic residents' satisfaction on sustainable development of public space in Nigeria. They also found that users were not satisfied with the present condition of facilities and amenities. The assessment of the relationship between socio-economic characteristics of the respondents and preference of recreational open spaces in Akure revealed that while sex and level of education are not significant characteristics, age and type of occupation are significant factors. This findings show that young and unemployed people tend to be affected by sex of other users, social class and income. Income plays an important role in the use of recreational open space. People with more will have enough money to spend on leisure, will have more time to spare and tend to be more conscious about the state of their physical and mental wellbeing. Findings from this study also revealed that the benefit derived from recreational open spaces significantly affect the satisfaction of the users. Poorly maintained, vandalized and unkempt recreation open space will offer fewer benefits and seriously limit its continuous use compared to well maintained, secure and neat recreation open space. It has been established that public space with appropriate facilities could enhance interactions and thus meet the need of all and sundry (Agboola et al., 2017) as suggested by Agboola and Oluyinka (2019), adequate provision become necessary for open spaces in a bid to improve the users' satisfaction

6.0 CONCLUSION AND RECOMMENDATION

Users' perception and satisfaction for public spaces is largely influenced by the state and management of recreational open spaces. The major indications of user dissatisfaction are inadequate provision, poor connection and poor maintenance of recreational open spaces. It is therefore important for both public and private owners to consider the needs of the people in achieving the purpose of a recreational open space. The state and local government should continue to provide and maintain new access with improvement of available access and connections to urban open spaces to create awareness for recreation and park provisions. Jurisdictional boundaries between different towns and local government in the states are important for the effective provision and management of recreation and park in the open spaces.

Moreso, proper planning policy implementation should be done planners, designers and government agencies which will consider users, communal development and social life style including business in the provision of physical infrastructure and creation of recreational open spaces for public recreation. Also it is a veritable tool to conduct better recreational maintenance and management studies within an interest area for location of recreational open space and facilities before allocation, implementation and construction. Recreational open space should also be aesthetically pleasing in the city and there should be adequate provision of recreational centres and recreational facilities to cater the increasing needs of the growing population of the city for quality environment, improved standard of living, public health benefit and wellbeing.

Furthermore, recreational open space especially parks has numerous advantages but most importantly reduction of

storm water runoff, enhancement of groundwater recharge, mitigation of urban heat island, and reduction in energy demands, protection against environmental contamination, enhancing the economic, social, cultural and environmental of any community. Therefore, it is the interest of every community to tap into this opportunity for societal and environmental satisfaction.

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