

# Socio-demographic determinants of green park utilisation in Uyo Capital City, Akwa Ibom State, Nigeria

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**ABSTRACT:** The study investigated the real-time users of the Green Parks within the Uyo Capital City of Akwa Ibom State, Nigeria, to determine the patronage level of the parks based on users' socio-demographic variables, including gender, age, marital status, level of education, employment status, and income. The study adopted an ex-post facto research design and a convenience sampling procedure in the selection of 392 respondents who gave their consent and responded to the questionnaire. Data collected were analysed using frequency count, percentages, T-test and analysis of variance (ANOVA). Demographic characteristics of the sampled population revealed the simple majority were: male (59.2%), 33 – 48 years age grade (48.7%), married (53.3%), employed (66.3%) and earning a monthly income of above ₦40,000 (56.6%). Among the six socio-demographic variables, age, level of educational attainment, employment and income status showed significant variations ( $p < 0.05$ ) in the level of utilisation of Green Parks, while gender and marital status showed no significant variation in the level of utilisation of the green infrastructure. Higher levels of education and income influenced the level of utilisation of the Green Parks. The study revealed that socio-demographic characteristics significantly influenced the utilisation of the facilities and the multi-functional spaces provided at the various Green Parks. Effective maintenance and provisions of facilities to attract the lesser-attended demographic group to the Green Parks were recommended.

**Keywords:** Green Parks, Nature-Based Solution (NBS), Nigeria, park utilisation, socio-demographic, visitors, Uyo Capital City.

## INTRODUCTION

Green Parks (GPs) are open, public or private areas mostly covered with vegetation, either directly or indirectly accessible to urban populations (Nova, 2016). They are defined as natural, semi-natural or planted spaces reserved for human pleasure and leisure or for the protection of wildlife or natural habitats (Sadeghian and Vardanyan, 2015; Šiljeg *et al.*, 2018). Green Park has become an important policy initiative in many cities internationally, and is being used to address a variety of environmental and social concerns today (Wolf and Madison, 2012; Udofia *et al.*, 2018). Some of such concerns are: landscape architecture and urban beautification; ecological stability like preserving natural balance/visual appearance, maintenance of healthy urban

environment through provision of clean air, improving the urban climate, unique support system for diversity of flora and fauna which enable dwellers to have access to nature; recreation avenue including physical, psychological and mental health rehabilitation; educational instructions and resource; economic; social contact and ecotourism (Baycan-Levent and Nijkamp, 2004; Daniel, 2021).

GPs are commonly found within or adjacent to urban built-up areas (Maruani and Amit-Cohen, 2007) and form a part of nature-based solution (NBS) projects, which are actions inspired by, supported by or copied from nature with the aim to help societies address a variety of environmental, social and economic challenges in sustainable ways (EC, 2015; Baur *et al.*, 2016; and

Kabisch *et al.*, 2016). Historically, the working classes were among the main target users for the development of parks in the United States (Burdge, 1969; Takyi *et al.*, 2018). The development dates back to the ancient times of the boulevard systems in Minneapolis and Kansas City. From 1859, when Frederick Law Olmsted, Calvert Vaux and over 3,000 workers established Central Park in the United States of America, a wave of enthusiasm for urban pleasure grounds swept across America and the world over (Harnik, 2003). In Akwa Ibom State of Nigeria, when the basic layout of the Uyo Capital City (UCC) was done, provision was made originally for 12 Green Parks/Green spaces in its master plans, which were: City Park, Zoo, Arboretum, Golf Course, City Square/cenotaph, two Stadia and five cemeteries (UCCDA, 2007). However, conscious establishment of Green Parks started in 2000 within the Uyo Capital City Development Authority and has been ongoing by subsequent governments (Akpan-Ebe *et al.*, 2013 and Udofia *et al.*, 2018), giving rise to Ibom Golf Resort, the Unity Park, Discovery Park, Ibom Plaza Park and the Climate Change Summit Recreational Park (Goodluck Jonathan Boulevard Park).

Although all the GPs provide important space-filling elements in shaping the form and layout of the city, they are, however, not uniform goods with a continuous scale of quantity, but rather hierarchies of distinct goods which provide a range of services that enable people of different socio-demographic backgrounds to meet their recreational activities. In other words, the GPs receive different categories of visitors with diverse intentions at different and even the same point in time. Studies in some climes have identified socio-demographic variables as one of the attributes that influence the utilisation of parks. For example, patterns of park utilisation are affected by different population groups of users, such as age (Liu *et al.*, 2017; Wang *et al.*, 2021; Ma *et al.*, 2022), income level (Wang *et al.*, 2015; Marquet *et al.*, 2019), education (Gu *et al.*, 2020; Ma *et al.*, 2022) and gender (Maller *et al.*, 2006; Ma *et al.*, 2022). The aforementioned do not provide an explicit situation across all park locations and cities. There is dearth of empirical studies and literature review on how socio-demographic factors affect the use and visitation of GPs in UCC, Nigeria. This study, therefore, investigated the composition of the users of the GPs in UCC and explored the significant variations in the levels of patronage (utilisation) based on six socio-demographic variables of the park users.

## MATERIALS AND METHODS

The study was conducted within the UCC, Akwa Ibom State, Nigeria. The study area lies between latitudes 4°55'30" and 5°7'30"N, and longitudes 7°51'0" and 8°20'30"E (Figure 1) and covers an area of approximately 366 km<sup>2</sup> in eight local government areas (AKMoED, 2014). The study area has a tropical climate marked by two

distinct seasons, namely, the dry season (November – March) and the wet season (April – October). The annual temperature ranges from 23.32 to 31.29°C, while the average monthly relative humidity ranges from 71 per cent to 88 per cent annually (AKMoED, 2014).

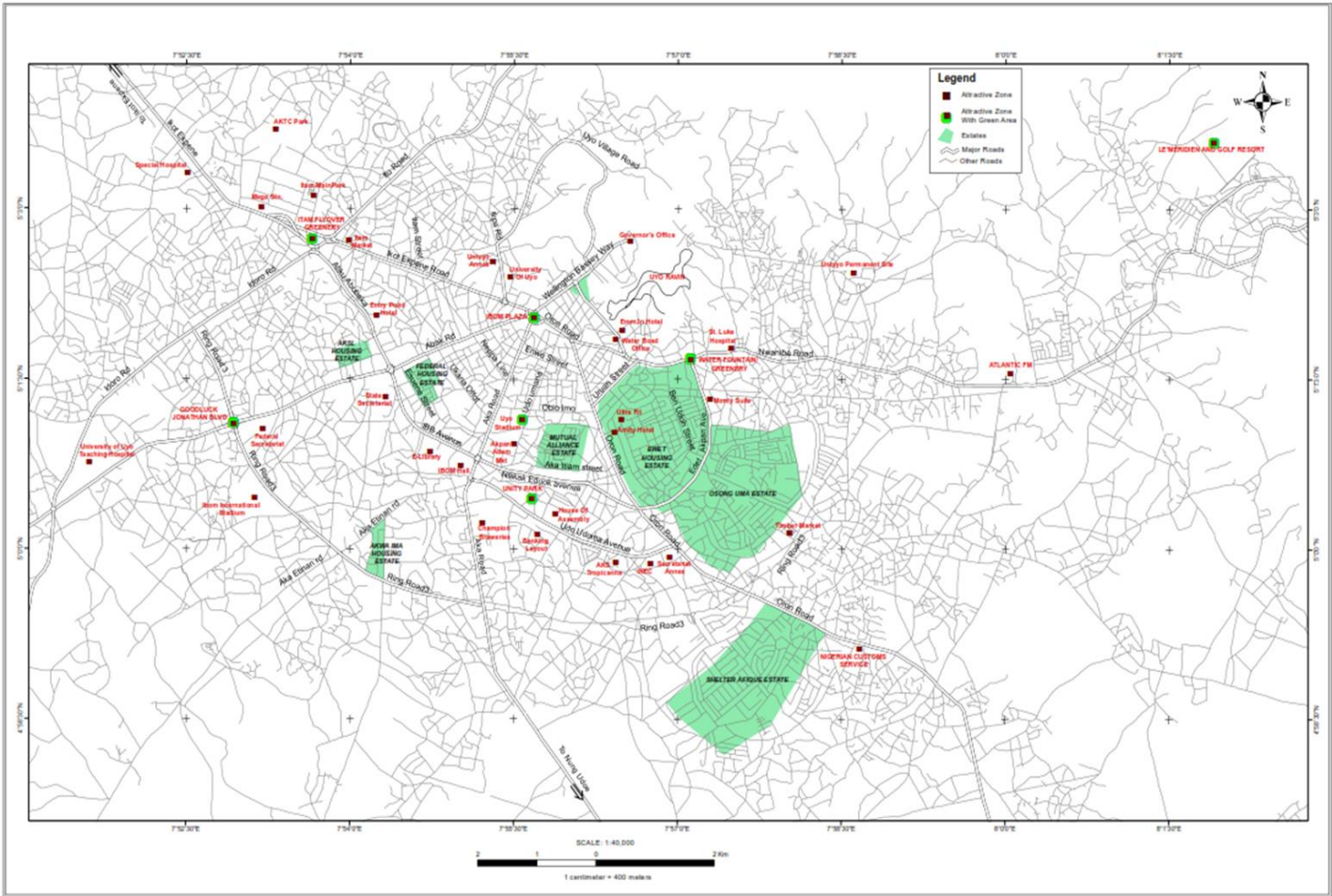
The study adopted an Expo-facto research design and a convenience sample sampling procedure (Jeuring, 2017). A set of questionnaires with multi-item data on value and patronage, along with demographic information, was used for data collection. Out of the 600 park visitors approached, 450 consented to take part in the study, but only 392 completed copies of the questionnaire constituted the study population. Data collection was made for three months in the rainy season and three months in the dry season, and the survey ran concurrently at the five GPs for consecutive two hours in the morning (7- 9 am), afternoon (12 – 2 pm) and evening (4 - 6 pm) to ensure face-time sampling of the various facade time users. In order to ascertain the levels of Green Park Utilisation (GPU) by respondents, the study adopted descriptive statistics, t-test for gender and analysis of variance (ANOVA) in analysing the other five selected socio-demographic characteristics of the sampled visitors.

## RESULTS AND DISCUSSION

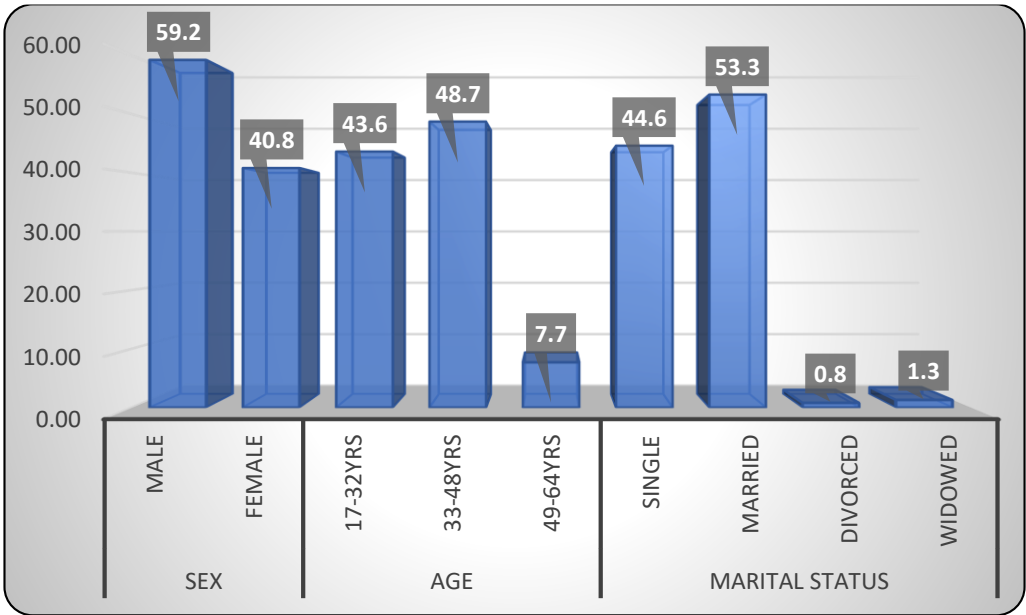
### Socio-demographic characteristics of respondents

Breakdown of the 392 respondents based on socioeconomic characteristics showed that 59.2% were male, 48.7% were of age 33 – 48 years old, as against 43.6% who were between 17 – 32 years and about 53.3% of the population were married, while the remaining 46.7% were either single, divorced or widowed (Figure 2). Results in Figure 3 revealed that 19.6% of the sample population were residing outside the UCC, 74% of them were either repeaters or frequent visitors to the parks, and 80.1% of the sampled population had acquired some form of education up to the tertiary level. Although indigenes of Akwa Ibom State constituted the majority of the sampled population, as revealed in Table 1, about 27% were non-indigenes from 22 out of the 35 States of Nigeria and the Federal Capital City (FCT), Abuja.

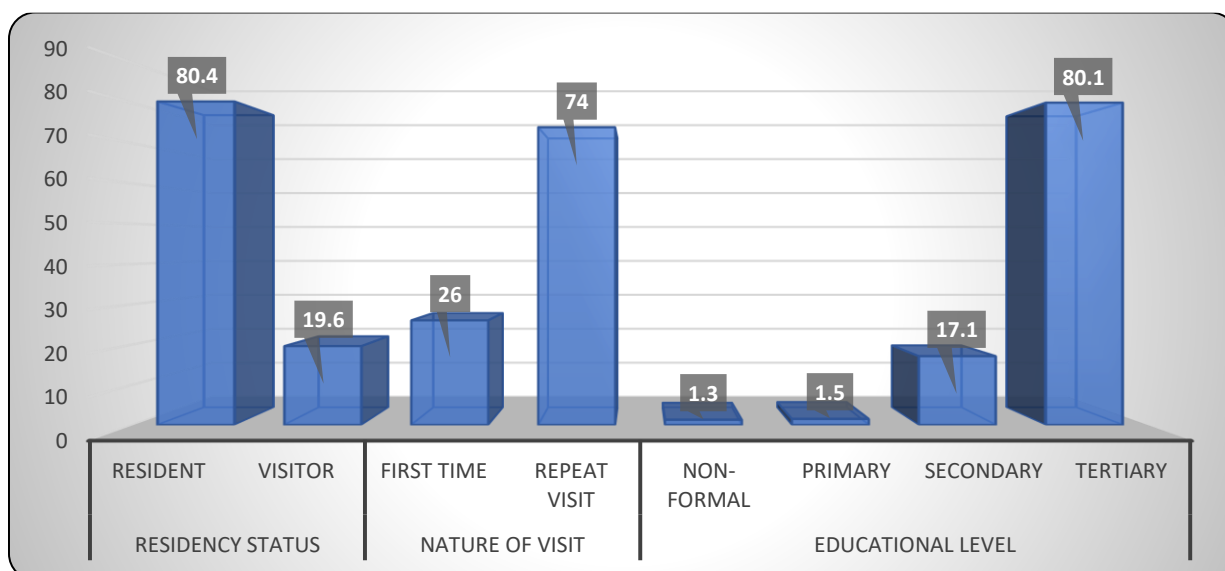
The distribution of respondents with regard to demographic characteristics (age, marital status and level of educational attainments) showed inclusiveness in utilisation of the urban green infrastructure. Interestingly, the high proportion of those who have acquired some levels of education showed the extent to which the educated population were aware of the various benefits derived from interfacing with the environment for healthy living. With regard to the State of origin, the profile of the respondents revealed a good geospatial distribution of visitors' experience of the ecotourism infrastructure in UCC. With one-fifth of sample respondents visiting the GPs residing outside the UCC, it revealed a good patronage



**Figure 1.** Map of Uyo Capital City (UCC) showing Green Areas (**Source:** OSSG-AKSG, Uyo, 2022).



**Figure 2.** Respondent population (in %) based on sex, age and marital status.



**Figure 3:** Respondents profile (in %) based on residency status in UCC, nature of visit to the green parks and level of education.

**Table 1.** Distribution of respondents according to their socioeconomic characteristics.

| Variables                   | Frequency (n = 392) | Percentage (%) |
|-----------------------------|---------------------|----------------|
| State of Origin             |                     |                |
| Akwa Ibom                   | 285                 | 72.7           |
| 4 Other South- South States | 53                  | 13.5           |
| 5 South East States         | 27                  | 6.9            |
| 6 South West States         | 14                  | 3.6            |
| 3 North Central States      | 2                   | 0.6            |
| 3 North West States         | 9                   | 2.3            |
| 1 North East States         | 1                   | 0.3            |
| Employment Status           |                     |                |
| Student                     | 85                  | 21.7           |
| Unemployed                  | 47                  | 12.0           |
| Employed                    | 260                 | 66.3           |
| Monthly Income (N'000)      |                     |                |
| 1,000 - 20,999              | 99                  | 25.3           |
| 21,000-40,999               | 71                  | 18.1           |
| 41,000-60,999               | 54                  | 13.8           |
| 61,000-80,999               | 28                  | 7.1            |
| 81,000-100,000              | 27                  | 6.9            |
| Above 100,000               | 113                 | 28.8           |

by the non-resident population. These results agreed with Kabisch *et al.* (2016), Baur *et al.* (2016), and Park and Song (2018) reports that Green Parks were utilised by people of different socio-demographic backgrounds as one of the nature-based solution projects.

Further revelation in Table 1 was that over half of the visitors' population (66.3%) were gainfully employed, with

over 56.6% earning a monthly income of above ₦40,000, inclusive of the 28.8% that earned over ₦100,000. This implied that most of the users of the Parks were economically better-off, earning a monthly income above the national minimum wage of ₦70,000. Hence, their frequent or repeated visits. The result was similar to Takyi *et al.* (2018), who reported that more than half of the

**Table 2.** T – test results of Green Park utilization based on gender of users.

| GPU index (Gender) | N   | Mean valuation index | t-value | P value  |
|--------------------|-----|----------------------|---------|----------|
| Male               | 232 | 0.6477               | 0.074   | 0.941 NS |
| Female             | 160 | 0.6461               |         |          |

NS = Not Significant ( $p > 0.05$ ).

**Table 3.** Analysis of variance (ANOVA) of GPU based on selected socio-demographic characteristics of user

| GPU index           | N   | Mean utilization index | F-value | P value  |
|---------------------|-----|------------------------|---------|----------|
| Marital status      |     |                        |         |          |
| Single              | 175 | 0.6356                 | 0.796   | 0.497 NS |
| Married             | 209 | 0.6559                 |         |          |
| Divorced/ separated | 3   | 0.7745                 |         |          |
| Widowed             | 5   | 0.6000                 |         |          |
| Age                 |     |                        |         |          |
| 33 – 48             | 191 | 0.6734 <sup>ab</sup>   | 6.817   | 0.001*** |
| 49 – 64             | 30  | 0.7127 <sup>b</sup>    |         |          |
| Level of Education  |     |                        |         |          |
| Non-formal Edu.     | 5   | 0.5529 <sup>ab</sup>   | 3.801   | 0.010**  |
| Primary Edu.        | 6   | 0.4559 <sup>a</sup>    |         |          |
| Secondary Edu.      | 67  | 0.6027 <sup>ab</sup>   |         |          |
| Tertiary Edu.       | 314 | 0.6617 <sup>b</sup>    |         |          |
| Employment status   |     |                        |         |          |
| Student             | 85  | 0.6211 <sup>ab</sup>   | 3.972   | 0.020**  |
| Unemployed          | 47  | 0.5870 <sup>a</sup>    |         |          |
| Employed            | 260 | 0.6664 <sup>b</sup>    |         |          |
| Income (₹)          |     |                        |         |          |
| 0 – 20,999          | 99  | 0.5969 <sup>a</sup>    | 10.778  | 0.000*** |
| 21,000 – 40,999     | 71  | 0.6193 <sup>a</sup>    |         |          |
| 41,000 – 60,999     | 54  | 0.5828 <sup>a</sup>    |         |          |
| 61,000 – 80,999     | 28  | 0.5956 <sup>a</sup>    |         |          |
| 81,000 -100,999     | 27  | 0.6253 <sup>a</sup>    |         |          |
| Above 100000        | 113 | 0.7572 <sup>b</sup>    |         |          |

\*\*\* = significant ( $p < 0.01$ ); \*\* = Significant ( $p < 0.05$ ); NS = Not Significant ( $p > 0.05$ ).

survey respondents at Stanley Park and Queen Elizabeth Park in Canada were employed. It also validated Burdge (1969), who reported that individuals with higher occupational status have the greatest variety of leisure activities.

#### Variations in Green Park utilisation based on socio-demographic

The variation in the mean level of utilisation by gender is presented in Table 2. It showed the male gender had a

greater mean index than the female. However, the result of the t-test showed no significant difference ( $p > 0.05$ ;  $P = 0.941$ ). Implying that there were no significant differences in the levels of utilisation of GPs in the study area due to the gender of respondents.

On the marital status of the users (Table 3, item 2), the variation across its categories showed no regular pattern in the mean index. Despite the differences in their mean index, with the divorced/ separated exhibiting a higher level of utilisation, the analysis revealed no significant difference ( $p > 0.05$ ;  $P = 0.497$ ). This implied that there were no significant differences in the levels of utilisation of GPs

in UCC based on the marital status of the visitors. Unlike in Tanzania, where gender and marital status were significant determinants of the likelihood of use/visit to urban amenity (Tibesigwe *et al.* 2018), the scenario is different in UCC, as this study showed that there was no significant difference in the levels of utilisation of GPs in UCC due to gender or marital status. The results implied that males and females, as well as single, married, divorced/separated or widowed, shared equal levels of GP usage in UCC. These were evident during the survey where couples and singles were seen hanging out for recreation, partaking in events or doing exercise at the various GPs.

With regard to the age of the park users, the respondents exhibited different utilisation levels with a clear pattern in their mean index across the three age grades as depicted by Item 1 in Table 3. The pattern showed an increasing index with an increase in age. Those within 49 - 64 year old exhibited higher levels of utilisation of the GPs than those in the 33- 48 and 17 – 32 age grades. Further tests revealed that there was a significant difference ( $p < 0.01$ ;  $P = 0.001$ ) in the levels of utilisation of the GPs in the study area based on the ages of visitors.

On the educational attainment (Item 3), the variations across the categories showed no regular pattern in the mean index, even though all the categories showed differences in their mean index. However, Duncan's mean separation placed those with no formal education in the same group with those who had acquired a secondary school education. Those with tertiary education, however, had the highest mean index. Despite the mean index grouping mentioned above, the variation was statistically significant ( $p < 0.05$ ;  $P = 0.010$ ). This implied that there were significant differences in the level of utilisation of the GPs in the study area based on the educational attainment of users. The import of these results is that age and additional educational attainment must have informed the visitors of the need, how, when and which of the GPs they should visit. This corroborates Tibesigwa *et al.* (2018), who reported that users in the mid-level of education (11 – 14 years of schooling) were more likely to visit urban GPs than the less educated ones (0 – 10 years of schooling). It also agreed with Ikawa (2015), who reported that the level of education affected the type of space visited, indicating social and political differences in access.

The respondents also exhibited different levels of utilisation of the GPs in UCC based on their employment status (Item 4), though with no regular pattern in their mean index across the three categories. Those who were employed exhibited a higher level of utilisation of the parks than those who were students and unemployed. The result revealed statistical significance ( $p < 0.05$ ;  $P = 0.020$ ) among the users of various employment status.

On the income level of the park visitors (Table 3, Item 5), there were variations in the mean level of utilisation according to their financial earnings. Those who earned above ₦100,000.00 exhibited a greater level of utilisation of the urban infrastructure than those who earned

₦100,000.00 and less. Though there was no regular pattern in the mean index, the result revealed statistical significance ( $p < 0.01$ ;  $P = 0.000$ ) among the various income categories. Empirically, employed users with higher income status were more than the unemployed ones with lower income status. This may not be unconnected with the use of the space to unwind (relaxation with friends) and ease of stress and boredom as reported by Heidt and Neef (2008). These findings are similar to Takyi *et al.* (2018) report that more than half of the survey respondents at Stanley Park and Queen Elizabeth Park in Canada were employed, likewise Pussella and Li (2019) and Tibesigwa *et al.* (2018) who reported income as one of the determinants of visitation to urban parks and other green recreational spaces in Sri Lanka and Dar es Salaam, Tanzania, respectively. Several other factors like visitation appeals, value, ease of accessibility, perceived security and safety, functionality of tangibles, and socioeconomic wellbeing status of users have been alluded to influence the utilization of urban parks in different climes (Tabassum and Sharmin 2013; Obi, 2015; Aziz *et al.*, 2017; Park and Song 2018; Asongu *et al.*, 2019; Ogunsusi and Adeleke, 2021).

## Conclusion and Recommendations

Social equity is vital in environmental quality assessment as in environmental sustainability. Thus, a good knowledge of who uses public spaces like the green parks in Uyo became imperative. Responses of the 392 different time façade users of the five GPs in UCC gave an insight into the patronage of the infrastructure. The representation of many socio-demographic characteristics attests to the inclusivity of the facilities and the usability of the multi-functional spaces provided at the various parks. The results also highlighted that there exists a relationship between the socio-demographic variables and the utilisation of the green spaces. Effective maintenance and provisions of facilities like park benches, lavatories, vendor outlets and reliable security service are recommended to boost confidence and attract the underserved and lesser-attended demographic group to the facility.

## CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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## REFERENCES

Akpan-Ebe, I. N., Okon, K. E., & Ihemadu, E. C. (2013).

- Environmental forestry Practices in the urban renewal of Uyo Metropolis, Akwa Ibom State, Nigeria. In: Popoola, L., Ogunsanwo, O. Y., Adekunle, V. A. J., Azeez, I. O. and Adewole, N. O. (eds.). *The Green Economy: Balancing Environmental Sustainability and Livelihood in an Emerging Economy*. Proceedings of the 36th Annual Conference of the Forestry Association of Nigeria held in Uyo, Akwa Ibom State, Nigeria. November 4 – 9. Vol. 1, 454-463.
- Akwa Ibom State Ministry of Economic Development (AKMoED) (2014). *Statistical Year Book* (8th Edition). A publication of the Directorate of Statistics, Ministry of Economic Development, Akwa Ibom State. 206pp.
- Asongu, S. A., Uduji, J. I., & Okolo-Obasi, E. N. (2019). Tourism and insecurity in the world. *International Review of Economics*, 66(4), 453-472.
- Aziz, A., Idris, N. H., Jamaludin, M., Mariapan, M., & Samdin, Z. (2017). The attractiveness of Bukit Nanas recreational forest as an ecotourism destination as perceived by foreign visitors. *International Journal of Asian Social Science*, 7(7), 546-556.
- Baur, J. W., Tynon, J. F., Ries, P., & Rosenberger, R. S. (2016). Public attitudes about urban forest ecosystem services management: A case study in Oregon cities. *Urban Forestry & Urban Greening*, 17, 42-53.
- Baycan-Levent, T., & Nijkamp, P. (2004). Urban green space policies: performance and success conditions in European cities. Paper presented at the 44th Congress of ERS in Porto, 25-29 August. Pp. 23-53.
- Burde, R. J. (1969). Levels of occupational prestige and leisure activity. *Journal of Leisure Research*, 1(3), 262-274.
- Daniel, K. S. (2023). Utilisation of Green Parks in Uyo Capital City, Akwa Ibom State: Evaluation and Characterisation. A PhD Research Seminar (Unpublished). Department of Forestry and Wildlife, University of Uyo, Uyo, Nigeria 110pp
- European Commission (EU) (2015). Towards an EU Research and Innovation Policy Agenda for Nature-Based Solutions & Re-Naturing Cities: Final Report of the Horizon 2020 Expert Group on Nature-Based Solutions and Re-Naturing Cities; European Commission: Brussels, Belgium.
- Gu, X., Li, Q., & Chand, S. (2020). Factors influencing residents' access to and use of country parks in Shanghai, China. *Cities*, 97, 102501.
- Heidt, V., & Neef, M. (2008). Benefits of urban space for improving urban climate. In: Carreiro, M. M., Song, Y. C., & Wu, J. (eds.). *Ecology, planning and management of urban forests* (pp. 84-96). Springer, New York, NY.
- Ikawa, J. V. O. (2015). The impact of policies on the development and management of recreational spaces in Nairobi, Kenya. A Doctoral Thesis submitted to the School of Environmental Studies, Kenyatta University, Kenya. Retrieved from <https://ir.library.ku.ac.ke/handle/123456789/13288>
- Jeuring, J. H. G. (2017). Weather perceptions, holiday satisfaction and perceived attractiveness of domestic vacationing in The Netherlands. *Tourism Management*, 61, 70-81.
- Kabisch, N., Frantzeskaki, N., Pauleit, S., Naumann, S., Davis, M., Artmann, M., Haase, D., Knapp, S., Korn, H., Stadler, J., & Bonn, A. (2016). Nature-based solutions to climate change mitigation and adaptation in urban areas: perspectives on indicators, knowledge gaps, barriers, and opportunities for action. *Ecology and society*, 21(2), 39.
- Liu, H., Li, F., Xu, L., & Han, B. (2017). The impact of socio-demographic, environmental, and individual factors on urban park visitation in Beijing, China. *Journal of Cleaner Production*, 163, S181-S188.
- Ma, Y., Brindley, P., & Lange, E. (2022). The influence of socio-demographic factors on preference and park usage in Guangzhou, China. *Land*, 11(8), 1219.
- Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations. *Health Promotion International*, 21(1), 45-54.
- Marquet, O., Hipp, J. A., Alberico, C., Huang, J. H., Fry, D., Mazak, E., Lovasi, G. S., & Floyd, M. F. (2019). Park use preferences and physical activity among ethnic minority children in low-income neighborhoods in New York City. *Urban Forestry & Urban Greening*, 38, 346-353.
- Maruani, T., & Amit-Cohen, I. (2007). Open space planning models: A review of approaches and methods. *Landscape and urban planning*, 81(1-2), 1-13.
- Nova, Z. (2016). Urban Green Belts (UGB) project WPT 1 Activity 1.1, *Common Methodology for Local Assessment and Analysis of Urban Green Space* (UGS) Retrieved 25 January 2018 from <http://www.zadra.hr/wpcontent/uploads/2016/10/Metodologija.pdf>.
- Obi, C. (2015). Challenges of insecurity and terrorism in Nigeria: Implication for national development. *OIDA International Journal of Sustainable Development*, 8(2), 11-18.
- Office of the State Survey General – Akwa Ibom State Government (OSSG-AKSG), Uyo (2022). Map of Uyo Capital City.
- Ogunsusi, K., & Adeleke, B. O. (2021). The Menace of Insecurity by Herdsmen Attack and its Implication on Tourism in Southwest Nigeria. *African Journal of Hospitality, Tourism and Leisure*, 10(2), 530-546.
- Park, C., & Song, H. (2018). Visitors' perceived place value and the willingness to pay in an urban lake park. *International Journal of Environmental Research and Public Health*, 15(11), 2518.
- Pussella, P. G. R. N. I., & Li Lin, L. L. (2019). Identification and assessment of the driving forces for the use of urban green parks and their accessibility in Colombo, Sri Lanka, through analytical hierarchical processing. *Geospatial Health*, 14(738): 72-80.
- Sadeghian, M. M., & Vardanyan, Z. (2015). A brief review on urban park history, classification and function. *International Journal of Scientific & Technology Research*, 4(11), 120-124.
- Šiljeg, S., Marić, I., Nikolić, G., & Šiljeg, A. (2018). Accessibility analysis of urban green spaces in the settlement of Zadar in Croatia. *Šumarski List*, 142(9-10), 487-496.
- Tabassum, S., & Sharmin, F. (2013). Accessibility analysis of parks at urban neighborhood: The case of Dhaka. *Asian Journal of Applied Science and Engineering*, 2(2), 48-61.
- Takyi, S. A., Siedel, A. D., & Adjei, J. K. (2018). Relationship between the demographic characteristics of park users and intensity of park use: the case of Stanley Park and Queen Elizabeth Park. *The Journal of Public Space*, 3(3), 49-74.
- Tibesigwa, B., Lokina, R., Kasalirwa, F., Jacob, R., Tibanywana, J., & Makuka, G. (2018). In *Search of Urban Recreational Ecosystem Services in Dar es Salaam, Tanzania*. Environment for Development - Discussion Paper Series. Efd DP 18-06 (March). 40pp.
- Udofia, S. I., Ekpa, N. E. and Nelson, I. A. (2018). Socio-economic impact of Green Parks in Uyo Capital City, Akwa Ibom State, Nigeria. In: Akpan, M., & Udofia, S. I. (eds.) *Forest: Its Wealth and Future*. Proceedings of the National Workshop of the Forestry Association of Nigeria (FAN), Akwa Ibom State Branch. June 28 – 29 at Uyo. Pp. 58-87.

- Uyo Capital City Development Authority (UCCDA) (2007). City Guide and Master Plan of Uyo Capital City.
- Wang, D., Brown, G., Zhong, G., Liu, Y., & Mateo-Babiano, I. (2015). Factors influencing perceived access to urban parks: A comparative study of Brisbane (Australia) and Zhongshan (China). *Habitat International*, 50, 335-346.
- Wang, P., Zhou, B., Han, L., & Mei, R. (2021). The motivation and factors influencing visits to small urban parks in Shanghai, China. *Urban Forestry & Urban Greening*, 60, 127086.
- Wolf, K. L., & Madison, W. I. (2012). The changing important of ecosystem services across the landscape gradient. In: Laband, D. N., Lockaby, B. G., & Zipperer, W. (eds.). *Urban – Rural Interfaces: Linking people and Nature*. American Society of Agronomy. Pp. 127-146.