

## Research Article

# SPATIAL VARIATION IN SOCIOECONOMIC STATUS AND GREEN INFRASTRUCTURE PERCEPTION IN OSOGBO

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### ABSTRACT

This work examines the place of socioeconomic status of residents in different residential zones against the perception of the available green infrastructure in the study area. Primary and secondary data were used. The primary data were obtained through observation, questionnaire administration and application of Google Earth. Using multi-stage sampling technique, Osogbo was stratified into three residential zones, (6) out of 24 political wards were selected; streets were also selected from the chosen wards via Google Earth. 2124 buildings existed in the sampled streets with 846, 715 and 563 in the core, transition and suburban residential areas respectively. Systematic sampling technique was then adopted in selecting 10th building; (10%) in each zone giving a total of 212 buildings. Descriptive and inferential statistics such as frequency tables, chi-square, analysis of variance and correlation were employed for data analysis and comparison of results within and between variables and among residential zones. The work did not only establish variation in the socio-economic statuses of respondents across the residential zones but also reveals implication of variation on their perception of green infrastructure in the study area. The work recommends improved socio-economic situation, planning education, collaboration in green infrastructural provision, design and enforcement of eco-friendly master plan.

**Keywords:** Perception, green infrastructure, socio-economic status and variation

### INTRODUCTION

Green infrastructure offers many benefits for the health and well-being of the people as well as the environment but socioeconomic status has been identified as a hindrance to accessing green infrastructure Mayor (2019). Socioeconomic status (SES) is a composite measure of an individual's economic and sociological standing. It is a complex assessment measured in a variety of ways that accounts for a person's economic and social position Linda *et al* (2015). It is economic and sociological combined total measure of an individual's or family's economic and social position in relation to others. SES is often commonly used to depict an economic difference in society as a whole (National Centre for Educational Statistics 2008). Perception is one of the most important aspects of human behaviour. It is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment (Walter and Alexander 2013, Williams, 2015). It involves deciding which information to notice, how to categorize this information and how to interpret it within the framework of existing knowledge. Perception gives a basic understanding on how people react to uncertainties and problems in their environment, as well as how they would participate in ameliorating the problem eventually (Afon, 1998). Green infrastructure could be described as the network of all green spaces that contribute to biodiversity conservation and benefit people through the maintenance and enhancement of ecosystem services while also playing a vital role in the mitigation of an adaptation to climate change (Berte & Panagopoulos, 2017). The utilization of financial components to clarify occupants' observation has been regular among scholars. These factors includes but not limited to wage, gender, ethnicity, religion, occupation and income have been utilized as a part of numerous cases as a major aspect of formal speculations with respect to occupants' observation; notwithstanding, as a rule, these factors are incorporated basically as a standard piece of review instrument.

### Literature Review and Theoretical Perspective

Among the earlier works that demonstrated strong connection between socio-economic status and green space perception include that of (Ritzer, 1996) who concluded that financial factors and inhabitants' perception of green space is directly related. Breuste and Artmann (2014) reported that financial variables play a moderately minor, and in some cases opposing, part in clarifying the variety in occupants' perception to green infrastructure. The authors ranged of financial components to figure out which ones may have an affecting impact. For instance, utilizing division investigation in an investigation of Scotland, recognized critical contrasts in occupant recognition identified with nearby and individual qualities, contact with vacationers, length of living arrangement, age, and dialect. In an investigation of northern Wales, Sheldon and Var (1984) found confirmation proposing that occupants' discernment toward green foundation advancement are socially bound, finding that locals and Welsh speakers were more delicate to green infrastructure social and social effects than were non locals and non-Welsh speakers. In an investigation of New Braunfels, Texas, Um and Crompton (1987) discovered German ethnicity was a factor in inhabitants' discernment on green foundation advancement; finding that the more joined an occupant was to the network in regards to origin, legacy, and length of habitation, the less decidedly he or she saw impacts, except for apparent unfavourable effects on ecological quality. Be that as it may, in spite of the fact that finding huge varieties in recognition toward green foundation advancement by statistic subgroup, Liu *et al* (1986) investigation of Hawaiian in habitants did not discover huge contrasts in occupants' observation in light of ethnicity and length of habitation. Age has additionally been investigated as a factor in inhabitant observation on green infrastructure and ought to get more consideration as the people born after WW2 resign and look for vacationer goals in which to work and play. Tomljenovic and Faulkner's (1999) investigation of Australia's Gold Coast found that more established inhabitants were for the most part as positively slanted toward green infrastructure improvement as youthful occupants. Also, more established occupants were more tolerant of

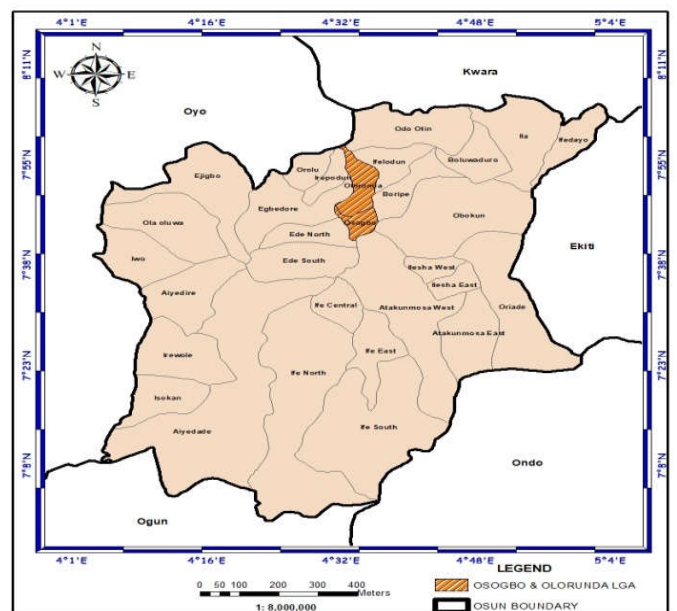
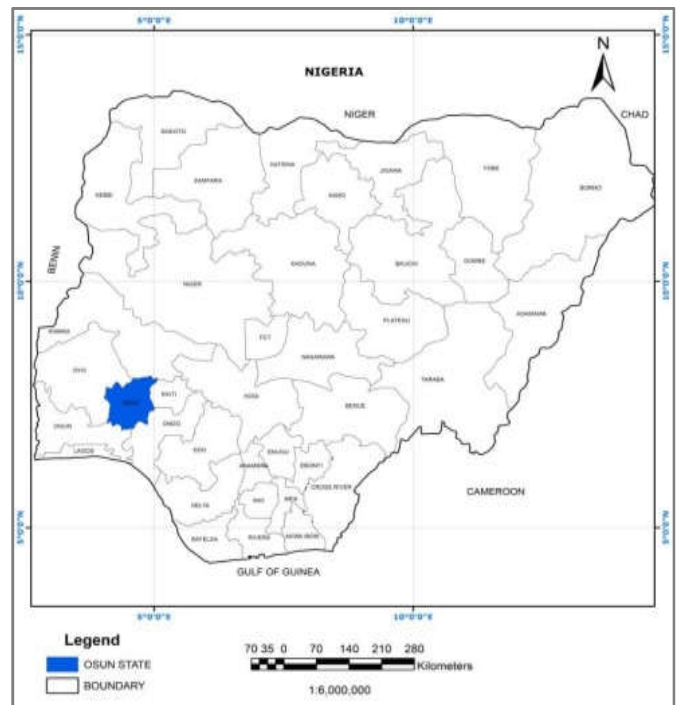
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worldwide vacationers and less worried about tourism's unfriendly natural effects. Cavus and Tanrisevdi (2002), in an investigation of Kusadasi, Turkey, likewise found a noteworthy connection amongst age and length of living arrangement and state of mind toward tourism improvement, however in opposition to Tomljenovic and Faulkner, they found that more seasoned occupants had more negative observations. The scholar inferred that no noteworthy relationship amongst sexual orientation and the study thing, "green Infrastructure has expanded wrongdoing in Charleston," despite the fact that they contended that wrongdoing and security are seen diversely by urban inhabitants. Past financial variables, the writing presents observations affected by the focus or spatial course of action of green infrastructure and exercises, the monetary effect of green foundation (counting social and ecological exchange offs), and sorts of recognition inside inhabitant gatherings or networks. A couple of scholars have explored the connection between urban space and residents' discernment on green infrastructure, endeavouring to make associations between observation in particular private zones and the physical separation amongst inhabitants and area of green foundation. In view of the factors of size, separation, and area, Toennies, Durkheim, Simmel, and Wirth's straight model of network improvement assumes that connection debilitates as populace and thickness increment. Therefore, spatial specialists have accepted that the closer an inhabitant lives to groupings of green infrastructure in a specific area; the more positive his or her discernment will be of green foundation advancement. So critical is this relationship that Hester (1993) in an investigation of the seaside town of Manteo, North Carolina, enrolled inhabitants in characterizing their locale's "holy structure," or those spots, for example, the waterfront and specific shops esteemed vital to the network's personal satisfaction. An immature part of the writing, this data can be critical to organizers looking for proper destinations for green foundation and additionally deciding regions unsatisfactory for green infrastructure improvement.

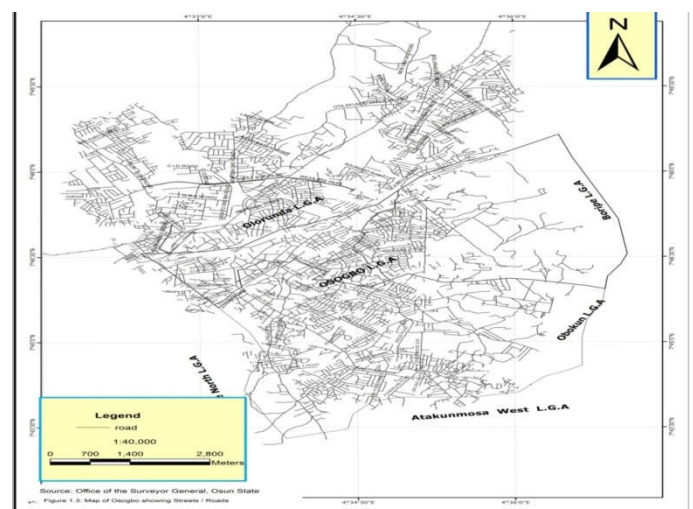
In an early investigation of inhabitants of Cape Cod, Massachusetts, Pizam (1992) affirmed that substantial convergences of green foundation offices and administrations in a goal prompted great observation toward green infrastructure improvement. Resulting research d is covered more mind boggling viewpoints to this relationship. For example, Tyrell and Spaulding (2004) found that Rhode Island families favoured green foundation development all in all yet felt less positive toward the area of tourism offices far to their place of inhabitants due to junk and litter. In any case, Pearce (1980) detailed that occupants of Harrison County, West Virginia, living in urban zones surveyed their locale's response to non-American voyagers emphatically, though area from urban focuses was related with negative impression of remote explorers. In an investigation of five rustic provinces encompassing a national diversion territory, Gursoy and Jurowski (2002) found that neighborhood, substantial clients of the zone had negative view of green infrastructure benefits and were not prone to help tourism advancement. The creators attested that negative recognitions may be the consequence of inhabitants' dreads that if guests' increment, capacity to utilize the amusement territory may be weakened. They presumed that tourism arranging ought to incorporate ensuring occupants' utilization of the entertainment region or upgrade their capacity to utilize it. The objective of the study is to examine the socio-economic characteristics of residents in the different residential zones of the study area and relate it to the residents' perception of green infrastructure in the study area.

**The Study Area:** Osogbo, the capital city of Osun State, Nigeria (See Figures. 1, 2 and 3). It is situated on Latitude 7° 46' North of the Equator and Longitude 4° 34' East of the Greenwich Meridian with an area of 47kmsq.



Source: Office of Surveyor General of the Federation, 2020.

Figure 1 & 2. Map of Osun State showing the Study Area



Source: Office of Surveyor General of the Federation, 2020.

Figure 3. Map of Osun State showing the Study Area

The city enjoys good attention from government and investors, populated by Yoruba that cohabited peacefully with other ethnic groups and nationals. As obtained in most other traditional Yoruba settlements, Osogbo is made up of three residential areas. These are the core, transition and suburban. the core residential area in Osogbo is comprised of housing that are laid out in traditional compounds with many small rooms, limited open space, disrepair road, or formal recreation space, and homogeneous population. The transition residential area is mostly well laid out, with a regular street plan, having many plots almost completely occupied by two or three-storey buildings. although, there is attempt to control land use, numerous retail services and other commercial activities exist within the zone, but industries are largely absent. The population in these areas is less homogeneous, consisting of people of diverse ethnic origins.

## RESULT AND DISCUSSION

### Residents' Socioeconomic Characteristics

The socioeconomic attributes considered includes gender, age, educational status and monthly income, marital status, occupation, household size, length of stay and the ethnic background. These variables are being discussed because they are imperative in evaluating people's perception about any subject (Stern & Guangan, 1998; Sadalla *et al*, 1999; Allan & Philip, 2001; Dunlap and Jones, 2002; Afon, 2011). The analysis was carried out and the results were discussed based on the three residential areas identified for the purpose of the study.

#### Gender of Respondents

Presented in Table 4.1 is the gender distribution of residents in the three residential areas. In the core area, 61.2% of the respondents were male while 38.8% were female. This was similar to the case of transition area. Male respondents comprised 59.7% of the respondents while female respondents accounted for 40.3%. Also in the suburban area, the proportion of male respondents (63.3%) was more than that of female respondents (36.4%). In all the residential areas, the proportion of male respondents (61.3%) was higher than the proportion of female respondents (38.7%). The result of Chi-square tests ( $\chi^2 = 85.121$ ,  $p = 0.000$ ) revealed that there was a significant difference in gender distribution across the three residential areas. It could be inferred from the findings that there were higher responses from male respondents across the three residential areas. This could be because men by tradition are the household heads. This also confers on them the role of getting involved in communal matters. This could be issues of green infrastructure provision, security and safety among others. Age of respondents is one of the fundamental socioeconomic attribute that can provide information on residents' perception to green infrastructure. McGehee and Andereck (2004) ascertained this in their study on the development of public infrastructure and perception of the positive or negative attitude of residents' provision of green infrastructure. Summarized in Table 1 are the age differences of household heads in the three residential areas of the study area. The age of household head was grouped based on dependency or youth (18-30 years), active population or young adult (31-60 years) and old adults or retired (above 60 years). From the summary of age distribution of respondents presented in Table 2, it was evident that 52.4% of respondents in Osogbo were young adults. The youth and adult respondents accounted for 11.2% and 36.0% respectively. However, the age distribution of residents within the identified residential areas of Osogbo revealed that young adults were dominant in the three residential areas. This age group constituted 58.8%, 65.1% and

23.6% respectively in the core, transition and suburban areas of Osogbo respectively. Next in descending order were the old adults. This group of respondents accounted for 42.2%, 33.3% and 41.1% in the core, transition and suburban residential areas respectively. The implication of this; according to Akinola (1998) is that the reasoning level of matured adults with respect to disaster assessment of green infrastructure is expected to be high. Further analysis shows that the minimum age was 26 and the maximum was 68. The mean age and standard deviation for the study area were 44.0 and 10.1 respectively. The mean age of respondents in the high, medium and low residential areas were 42.8 years, 46.9 years and 44.4 years respectively. The standard deviation about the mean age of respondents in the high density area was 9.5 years; it was 10.9 and 9.3 years in the medium and low residential areas respectively. This indicates variation in age distribution of respondents across the three residential zones. The result of Analysis of Variance ( $F = 5.761$  and  $p = 0.003$ ) further confirmed the variation. This implies that age plays a significant role in the opinion of residents on green infrastructure in the study area. One other vital trait of respondents that has been established to be significant to how an individual would manage environmental issues is their marital status. The respondents' marital status was classified into two: married and single. Married group consisted of respondents that had at least once been double. The group therefore include: divorcees, separated and widowed among others. From the summary presented in Table 4.3, it was established that 58.5% of household heads in the study area were married. Investigation of the same social attribute in the different residential densities revealed that married household heads were the most predominant group. This group constituted 57.7%, 63.9% and 52.7% respectively in the core, transition and suburban residential areas of the Osogbo respectively. Differences in the marital status of household heads across the three residential areas were statistically significant. The chi-square result of ( $\chi^2 = 25.322$  and  $p = .000$ ) confirmed this.

Another variable considered to influence residents' perception to green infrastructure is education status of respondents which is important to this study. Education is an attribute that could aid resident's perception to green infrastructure. For the purpose of this study, educational backgrounds of respondents are classified into three (3), which are, primary, secondary and tertiary education. Table 4 presents information on the educational level of respondents across the three residential densities in the study area. It was discovered that respondents that had secondary education and tertiary education in the core area accounted for 43.5% and 47.1% respectively while respondents with primary education accounted for 9.4%. In the transition area, respondents with tertiary education dominated the area with 66.6%, while respondents that had at least secondary education accounted for 26.4%. Also, suburban area demonstrates relatively educationally enlightened respondents. This is because 76.4% and 23.6% of the respondents had tertiary and secondary education in the residential area respectively. In all the three residential areas, 61.3% of the respondents had tertiary education, 32.5% had secondary education while 6.2% had primary education. Specifically, it is shown in the table that there was variation in the educational distribution of respondents across the three strata. This was further corroborated by chi square results ( $\chi^2 28.381 = 25.087$  and  $p = 0.000$ ). The chi-square analysis revealed that the difference in education could significantly influence residents' perception on the importance of green infrastructure across the different residential areas of Osogbo. Information on the occupation distribution of respondents in the study area is presented on Table 4.5. This study established that 26.9% of the respondents were traders, 40.1% were casual worker, 9.4% were civil servant, 17.9% were working in the private sector, while others such as artisans of varying occupations accounted for 6.6%.

**Table 1. Gender of Respondents in the study area**

Gender	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Male	52	61.2	43	59.7	35	63.6	130	61.3
Female	33	38.8	29	40.3	20	36.4	82	38.7
Total	85	100.0	72	100.0	55	100.0	212	100

Source: Author's Field Survey (2020)

**Table 2. Age of respondents**

Age	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
18 – 30	-	-	1	1.6	15	27.3	16	11.2
31 – 60	50	58.8	48	65.1	13	23.6	111	52.4
Above 60	35	42.2	24	33.3	27	41.1	78	36.0
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

**Table 3. Marital Status of Respondents in the Study Area**

Marital status	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Married	49	57.7	46	63.9	29	52.7	124	58.5
Single	36	42.3	26	36.1	26	47.3	88	41.5
Total	85	100	72	100	70	100	212	100

Source: Author's Field Survey (2020)

**Table 4. Educational Status of Residents in the Study Area**

Education status	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Primary	8	9.4	5	7.0	-	-	13	6.2
Secondary	37	43.5	19	26.4	13	23.6	69	32.5
Tertiary	40	47.1	48	66.6	42	76.4	130	61.3
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

**Table 5. Occupation of Respondents**

Occupation	Core		Transition		Suburban		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Traders	29	40.0	12	15.9	16	28.6	57	26.9
Casual worker	33	38.8	29	39.7	23	41.8	91	40.1
Civil service	10	11.7	2	3.2	08	14.3	20	9.4
Private sector	3	3.5	30	41.3	05	8.2	38	17.9
Others	10	11.7	-	-	04	7.1	14	6.6
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

**Table 6. Household Size of Respondents**

Income classification	Core		Transition		Suburban		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Below ₦24, 000 (LI)	41	48.2	6	8.5	5	3.9	52	24.5
₦24501-54000 (MI)	28	32.9	36	48.9	17	30.3	85	40.1
Above ₦54,000 (HI)	16	18.8	31	42.6	34	61.6	81	38.2
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

**Table 7. Household Size in the Different Residential Densities**

Household Size	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Small	6	7.4	57	78.7	50	90.2	113	53.3
Medium	24	28.4	15	21.3	5	9.8	44	20.8
Large	55	64.2	-	-	-	-	55	25.9
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

Table 8. Length of Stay

Number of years	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
1 – 10	61	71.4	49	68.1	31	56.9	141	66.5
11 – 25	12	14.3	21	29.2	9	16.7	42	19.8
26 – 40	12	14.3	2	2.8	12	20.8	26	12.3
Above 40	–	–	–	–	3	5.6	3	1.4
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

Table 9. Ethnicity of Residents

Ethnic Group	Core		Transition		Suburban		Total	
	Freq.	%	Freq	%	Freq	%	Freq	%
Yoruba	70	82.9	68	94.4	51	94.4	189	89.2
Igbo	9	10.0	3	4.2	2	2.8	14	40.1
Hausa	4	4.3	1	1.4	2	2.8	20	6.6
Others	2	2.9	–	–	–	–	2	0.9
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

Table 10. Religious Status of Residents

Religion	Core		Transition		Suburban		Total	
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Christian	29	34.3	37	51.4	30	54.5	96	45.3
Muslim	48	56.7	31	43.1	25	45.5	104	49.1
Traditional	8	9.0	04	5.6	–	–	13	6.1
Total	85	100	72	100	55	100	212	100

Source: Author's Field Survey (2020)

However across the three residential areas, majority of the respondents were casual worker. This accounted for 38.8%, 39.7% and 41.8% in the core, transition and suburban residential areas respectively. The variation in occupational status of respondents in the three residential areas was statistically significant through the Chi-square test computed ( $\chi^2 = 37.396$  and  $p = 0.000$ ).

The income status of the respondents could influence the perception of residents towards the green infrastructure. Thus, in this context it is necessary to determine the monthly income of the respondents' in the study area. Reconnaissance survey carried out on household heads was based on the Osun State Civil Service Salary scale. Household head who are on salary grade levels 01-06 were categorised as low income earners, those on grade levels 07-10 were middle income earners and those on the grade levels 12 and above were high income earners. Therefore, information obtained from Osun State Civil Service Commission showed that the low income earners earned below ₦24,500; while that of middle earner earned between ₦24,501 and ₦54,000 and the high income earner earned above ₦54,000. As presented in Table 5, residents that earned below ₦24,500 had a proportion of 48.2%, 8.5%, and 3.2% in the core, transition and suburban residential densities respectively. Residents that earned between ₦24,501-₦54,000 accounted for 32.9%, 48.9% and 30.3% in the core, transition and suburban residential densities respectively. Also, residents that earned above ₦54,000 represented 82.7%, 15.0% and 2.5% in the three residential densities respectively. Hence, in the study area, it was observed that the middle income earner had the highest proportion with 40.1%, while residents that were high income and low income earners accounted for 24.5% and 38.2% respectively. Further analysis revealed that variation in income of respondents across the three residential areas was statistically significant ( $F = 183.484$  and  $p = 0.000$ ). With variation in the average monthly income of household heads, this study hypothesized that perception on green infrastructure will also vary among residents in Osogbo. Household size was measured by the number of family members living together under one roof and maintaining a unique eating arrangement (National Bureau of Statistics 2009).

The variable captures the effect of the size of a household on the condition and distribution patterns of green infrastructure in the study area. For the purpose of this study, Jim and Chen, (2006) household size classification was adopted. Household with 6 members and below, household that contained 7 to 10 members and household with more than 10 members. These were respectively regarded as the small, medium and large sized household size. From the summary presented in Table 7, low residential density area had the largest proportion of respondents with small sized household. This group accounted for 90.2% of the households within Osogbo area. Households in the medium and high densities with small sized household were 78.7% and 7.4% respectively. Also, the analysis of the household that were medium size revealed that the largest proportion were in the high. This group accounted for 28.4% in the study area. However, 21.3% of the respondents in the medium residential area were of medium sized household. The average household size for the study area is consistent with the national average reported by National Bureau of Statistics (2006). The average household size for the study area was 5 while it was 6, 5 and 5 respectively in the high, medium and low residential areas. The minimum household sizes for the high and medium residential areas, were 1 while that of the low density was 2. The respective maximum household sizes for the high, medium and low densities were 13, 8, and 8 respectively. Difference in household size across the three residential areas was significant. The result of the One Way Analysis of variance ( $F = 4.304$ ;  $p = 0.014$ ) confirmed the variation on this demographic attribute of respondents in the study area. It can be concluded that the reduction in average household size from high residential areas towards the low residential area was statistically significant. It has been noted that length of stay influences residents' awareness and perception of their environment (Jayamala, 2009, Sanni et al 2010). The relevance of length of residence is therefore important to this study. The number of years a household has been living in an area was therefore categorized into four. That is, 1 - 10 years, 11 – 25 years, 26 – 40 years and above 40 years and this is presented in Table 8. It was revealed that 71.4%, 68.1% and 56.9% of the respondents respectively in the core, transition and suburban

residential areas had been there for 1 to 10 years. The proportion of respondents who had stayed between 11 and 25 years in the three residential areas was respectively 14.3%, 29.2% and 16.7%. Those who had stayed between 26-40 years in the core, transition and suburban areas accounted for 14.3%, 2.8% and 20.8% respectively while those that have spent above 40 years were found in the suburban residential area and this accounted for 5.6%.

The descriptive statistics of the respondents' length of stay in the study area revealed that the minimum length of stay was 2 year, while the maximum was 58 years. The mean and standard deviation of respondents' length of stay in the study area were 6.5 and 6.4 years respectively. The mean length of stay was respectively 7.1, 6.4 and 6.1 years for the core, transition and suburban residential areas. The standard deviations of length of residency for the core, transition and suburban residential areas were 6.6, 5.1 and 4.1 years respectively. Also, variation in residents' length of stay in the different residential densities was significant ( $F = 3.366$  and  $p = .036$ ). Ethnicity is known to be the custom or way of life of a particular region where the same cultural background is shared, guided by different traditions to different ethnic group. Um and Crompton (1987) established that German ethnicity was a factor in perception toward infrastructure development. This implied that the more attached a resident was to the community regarding birthplace, heritage, and length of residence, the less positively he or she perceived impacts, with the exception of perceived adverse impacts on environmental quality. Hence, Ethnicity is important to this study in order to know how each tribe relate to different green infrastructure in the study area.

Findings showed that Yoruba tribe constituted the majority of ethnic groups in the study area with a proportion of 82.9% in the core area, 94.4% in transition area and 94.4% in suburban residential areas. The Igbo tribe accounted for 10.0% in the core area, 4.2% in the transition and 2.8% in the suburban area. Respondents who were Hausas showed a low population in the core, transition and suburban with 4.3%, 1.4% and 2.8% respectively. This may be because the study area is recognized as a south west part of Nigeria which is known as the Yoruba land the sense of place colouration of green infrastructures of the city may play significant roles in Yorubas' perception of the available green infrastructure.

The religion background of the respondents was categorized into three which are Christian, Muslim and traditional. The distribution of respondents as classified across the three residential densities is as presented in Table 10. As presented in Table 10, religion difference among respondents in the core area revealed a higher proportion of Muslim (56.7%), followed by Christian (34.3%) while 9.0% accounted residents that are traditional worshippers. In the transition area, the Christians accounted for 51.4%, followed by Muslim with 43.1% while traditional worshippers represented 5.6%. The result further revealed that respondents in the suburban residential area exhibited a proportion of 54.5% and 45.5% with the Christian and Muslim respectively in the study area. In summary, it could be inferred that the high proportion of responses to Christianity and Muslim in the three residential areas could be attributed to high number of churches and Mosques in Osogbo this also has implication on residents' perception since crusade and other religious gatherings do take place on open spaces.

### Summary, Conclusion and Policy Implication

The study reveals significant variation in different variables measured in each and across the strata of the study area. Age, educational level, income and length of stay in the study area are among the major variables that determines residents' perception of green infrastructure in the study area. Importance attached to green

infrastructure is generally low. But to compare the level of perception among the three zones; it could be said that, core area residents has a better, perception ...intermediate and suburban and green infrastructure is unevenly distributed. More importantly, the study exposes variation in the perception of green infrastructure is a factor of socio economic standing; age, level of education, income level, household size, among others among others in the three residential areas of Osogbo. Perception is lowest among the residents of the core, lower among those in the zone of transition and low among those who reside in the suburban. Improved socio-economic status do guarantees improved living environment and consequently improved standard of living. It's therefore contingent upon our leaders particularly in developing countries at all levels to ensure improved standard of living through provision of sustainable jobs and other forms of economic empowerment. Peoples' knowledge of the need, importance and place of green infrastructure in their wellbeing could be improved upon through planning education as well as all round collaboration and community engagement. Adequate provision of green infrastructure thought enforcement of Master Plan can change the narratives.

### REFERENCES

- Abraham P., Asli, D. Tasci, A. (1987): Experienscape: expanding the concept of servicescape with a multi-stakeholder and multi-disciplinary approach (invited paper for 'luminaries' special issue of International Journal of Hospitality Management) <https://doi.org/10.1016/j.ijhm.2018.06.010>
- Afon, A. O. (1998). *Perception of Environmental Quality of the Core of Ogbomoso*, *Oyo Annals of Tourism Research*13, 2: 193-214.
- Berte E. and Panagopoulos, T. (2017) Green Infrastructure, Nature Based Solution for Sustainable and Resilient City. Oviento, Italy
- Breuste, J. and Artmann, M. (2014). Allotment gardens contribute to urban ecosystem *Dwelling, seeing, and designing*, D. Seamon, ed. Albany: State University of New York Press.
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G. & Jones, R. E. (2000). New Trends in Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues*, 56: 425-442. doi:10.1111/0022-4537.00176
- Gursoy, D., and Claudia J. (2002). Resident attitudes in relation to distance from tourist attractions. <http://www.ttra.com> (accessed March 22, 2018).
- Hester, R. T. (1993). Sacred structures and everyday life: A return to Manteo, NC. In
- Linda A. Winters-Miner PhD., Gary D. Miner PhD, in Practical Predictive Analytics and Decisioning Systems for Medicine, 2015.
- Mayor, L. (2019) Using green Infrastructure to protect people from air pollution, Greater London Authority
- Liu, J. C. and Turgut V. (1986). Resident attitudes toward tourism impacts in Hawaii.
- McDonald, R. I., Forman, R. T. T. & Kareiva, P. (2010). Open space loss and land inequality in United States' cities, 1990-2000. *PLoS ONE*,5(3), e9509. doi:10.1371/journal.pone.0009509.
- resort. *Annals of Tourism Research*27, 1: 93-114
- Ritzer, George. (1996). *Sociological theory*. 4th ed. New York: McGrawHill.
- service: Case study Salzburg, Austria." *Journal of Urban Planning and Development.*, 10.1061/(ASCE) UP. 1943-5444.0000264, A5014005
- Sheldon, R. and Var (1984) Host perceptions of tourism: A review of the research
- Cavus, S., Tanrisevdi, A. (2002) Residents' Attitudes Toward Tourism Development: A Case Study In Kusa Dasi, Turkey Cognizant Communication Corporation. Volume 7, Numbers 3-4, 2002,

- pp. 259-269(11). DOI: <https://doi.org/10.3727/108354203108750102>.
- Tomljenovic, R., and Bill F. (1999). Tourism and older residents in a Sunbelt
- NCES (2018): National Center for Education Statistics (NCES) Academic Library Survey
- Um. S., Crompton J. L., (1987). Measuring Resident's Attachment Levels In A Host Community. Volume: 26 issue: 1, page(s): 27-29 Issue <https://doi.org/10.1177/004728758702600105>
- Williams, Y. (2018). <http://study.com/academy/lesson/what-is-perception-in-psychology-definition-theory-quiz.html>, assessed 26/03/2018

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