



Covenant Journal of Research in the Built Environment (CJRBE) Vol. 10 No. 1, June, 2022 ISSN: p. 2384-5724 e. 2384-5716 DOI: xxxxxxxxxxxxxxx

An Open Access Journal Available Online

Nexus between Public Spaces and City Image: A Case Study of Akure, Nigeria

Adegunloye O.O.¹, Folorunso C.O.², Taiwo, A.A.³, and Adegbehingbe, V.O.⁴

¹⁻⁴Department of Architecture, Federal University of Technology, Akure, Ondo State, Nigeria. *E-mail: dunniaderibigbearc@gmail.com*,

Received: 02.05.2022 Accepted: 09.06.2022 Date of Publication: June, 2022

Abstract: Public spaces connect one part of the city to the other. They are related to the physical elements of the city that shape the image. This study examined the nexus created by the relationship between the physical environment of public spaces and city image. The study noticed neglect which threatens the physical environment of public spaces and discourages users. The relationship assessment was based on the image of the physical and natural features of public spaces as perceived by the users. This study analyses the linkages between the uses and the physical environment in relation to public spaces to improve the city image of Akure, Nigeria and provides an insight into the user's perception of the totality of the physical environment in the context of legibility, imageability and perception to understand how the image of the city is formed. The study summarizes and interprets findings from the quantitative research approach using a structured questionnaire conducted with 384 respondents from the core, transitional and peripheral zones in Akure. The data obtained were subjected to single factor descriptive analysis, inferential analysis and hypothesis testing. The results showed there is a positive relationship between public spaces and city image. The study recommends that public spaces development must inculcate planning and control strategies and a holistic policy by managers of public spaces to improve the image of the city, effort should be geared towards creating an attractive space to attract visitors and investors through investment in public spaces.

Keywords: City Image, Perception, Public, Spaces.

1.0 Introduction

Cities all over the world are struggling to cope with the rapid growth rates, and the preservation of public spaces has become a public problem affecting urban life (Gehl and Svarre, 2013). Public spaces are the spaces that are open to people and accessible by all categories of people, (Madanipor 2010). Public spaces include streets, squares, plazas and urban green spaces, which are open and accessible to everyone for assembly and socializing (Ravazzoli and Torricalli, 2017). Public spaces are living spaces where activities are carried out, where people come together to socialize, exchange ideas and make contact with each other. Arrangements of spaces and facilities affect usage and it plays a major role in the image of the city.

For this study, public space is defined as the physically planned area or environment, made up of various facilities such as sit-outs, indoor and outdoor relaxation facilities to enhance and promote social satisfaction for users. These public spaces in the urban environment are threatened daily by many factors which subsequently affect the city's image. Public spaces are to shape the physical image of the city by connecting one part of the city (Kostrzewska, another 2017). to Considering all the benefits that are associated with the availability and uses of public spaces, there is a need to investigate the relationship between the image of the city and the environment of public spaces. Varieties of interpretations are given to city image, and it means many things to individuals. The image of the city is a presentation of the city landscape, buildings and spaces. Cities are competing with each other to be attractive places for people to live and work.

Pallasma (2005) posits from the architect's perspective that, the image of a city refers to the visual aesthetics of the city or how appealing the city is to the observers. The image of the city is mostly related to the visual quality. It plays an important role in how the city is appreciated. The city should be attractive and promote global and socioeconomic growth hence the need to achieve a viable attractive city (Newton, 2009). The image of the city relates also to the environmental image of the city which Lynch (1960) posits as the exterior physical world that is held by an individual. The image perceived is between the observer and the environment which may also vary between observers. Neacsu (2019) noted that a good image of the environment can stimulate a positive attitude and harmonic behaviour in people. As the city is experienced through its image, so also it affects the mood and mental state of its inhabitants, (Pompe 2019). It is therefore expedient to generalise that having a beautiful while serene environment exercising or visiting public spaces can be a powerful motivator of physical activity, (Bedimo-Rung et al 2005).

The image of a place is a two-way process and is the result of contact between the observer and the environment (Panah and Shankar, 2017). Image and identity are the understanding of a place in the city and the way people perceive its visual images. The quality of public spaces influences the quality of life of inhabitants and the city image as a whole. A public space located in the city centre is representative of its

identity and image (Wojnarowska, 2016). The image of a space strengthens the unity of the city (Chitrakar, 2016). It can be classified as a poor image or a good image depending on the mental construction of what the observers see (Lynch, 1960).

Good public spaces are required for the social and psychological health of the community dweller. For an attractive city image, it is important to have effective spaces improve public to city attractiveness, (Mehta 2013). Public spaces in the city play vibrant roles in how the cities perform their functions in terms of quality and output (Polska, 2017). The quality of public spaces in any city does not only affect the city view and how it is perceived by an individual but also the living standard and economic growth of the city dwellers. Madanipour (2010) argues that public spaces have lost their importance in most cities in developing countries, hence they need improvement. The image of the city as used in this study relate to the image of its public spaces. The study examined the relationship between city image and public spaces in the context of its physical environment.

1.1 Hypothesis Testing

 H_01 : there is no statistically significant relationship between the environment of public spaces and city image.

2.0 Literature Review

In discussing the relationship between city image and public spaces, it is worth highlighting the concepts of city image, legibility, imageability and perception. Montgomery (1998) defined image as the combination of the identity of place and user perceptions. The image of a place is the people's set of feelings and impressions about a particular place. Image of a place as seen by an observer connotes different meaning and interpretation, Suthasupa (2012) noted that images differ from individual to individual but share features that result in a public mental image. The image of the city by the observer must be about an object or a place for easy identification.

The concept of city image according to Lynch (1960) sought to understand how people perceive their environment and ascertained that the elements or parts of the cities are designed as paths, edges, nodes, landmarks, and districts. Koseoglu and Onder (2011) affirming Lynch (1960) and Pallasmaa (2005) described the concept of city image to mean the possibility of organizing an environment within an imageable and coherent pattern. The contents of the city images which refer to the physical form are classified into five (5) distinct elements and described by Lynch (1960) as follows:

- i. *Paths*: as the channels through which the observer moves. They include streets, walkways, transit lines, canals, railroads
- ii. *Edges*: as boundaries between two phases. Such as shores, railroad cuts, edges of development, and walls.
- iii. *Districts*: as the medium to large sections of the city.
- iv. *Nodes*: as points, the strategic spots in a city into which an observer can enter,
- v. *Landmarks*: is a point-reference within the city.

The legibility of the city describes peoples' understanding, familiarity and enjoyment of

the city (Kelly, 2001). Legibility also refers to the way people read their environment, and it depends on whether or not the image is positive or negative. The city must be flexible and easy to walk through to public spaces, public transport and green areas. Kelly (2001) noted that the physical and spatial quality of the surrounding is an essential consideration in city legibility. For effective city legibility, orderliness and visual organisation between city components must be achieved.

People's perception of a city varies with the individual interpretation of the various elements of the city profile. The concept of imageability is the understanding of how people see the city, how they interpret the image and understand the city. Lynch (1960) described the imageability of the city as the quality of the physical object that gives an observer a strong vibrant image, simplicity in which one can identify the patterns and significance of their environment and how pleasing it can be.

Lynch (1960) reiterated that image development is a two-way process between observers and observed, and attributed image as a product of immediate and past memory being experienced by observers. Imageability/imagery is the physical quality of the urban environment in terms of its shape, colour or arrangement which forms the mental image of the city. Imageability/imagery is the physical features of a city that lead to image formation which comes with the city's challenges and its delight.

The visual perception of public space is important to the users' because they are the primary resources who have known the place (Perovic and Folic (2012). Perceptions of Public spaces are subjective and are based on users' experience which differs from one person to another. Carmona (2010) opined that public space is not just physical scenery but it also has a lot of subjective sense for its users that can gather over time. The perception of the users of public space can only be expressed in terms of how the spaces are interpreted by them and the meaning given to them. Chartakar (2006) opined that the meaning users of public spaces expressed aid to improve a sense of community which has a strong relationship with its physical and social dimensions.

However, various factors influence the formation of the visual perception of a place which are, economic, social, industrial, cultural, historical and individual, (Perovic and Folic (2012). Meanwhile, for public space to satisfy users' needs and to also assess how they express their perception of the place so many factors must be considered, Nasution and Zahrah (2014) identified seven factors of public space perception such as accessibility, facility, elements. activity. natural environs. management and the intensity of usage.

3.0 Methodology

The research was carried out using a survey design method. Numerical, descriptive and explanatory data obtained. were Ouestionnaires were administered to residents and tourists who utilized the public spaces in Akure. A total of 384 copies of questionnaires were distributed and 334 were retrieved and used for this study. The sampling frame comprises twelve (12) public spaces in Akure out of which five: Game reserve Amusement park, Oyemekun rocks, Democracy park, Ministry of Agriculture Biological garden and House of

Assembly Arcade were selected. Data collection was in the evening, at weekends and during festive periods when patronage re expected to be higher. Both descriptive and inferential techniques were used in analysing the data obtained from the field survey. Attributes of design principles such as harmony, rhythm, balance, variety and proportion were used to measure the city image while variables relating to the physical environment were used for public spaces.

4.0 **Results and Discussion**

The field survey revealed that the majority of the respondents are male with the highest percentage of 63.5 while 36.5% of the respondents are female. Less than 30 years engaged more in leisure time and physical activities than all other age-group with a percentage of 43.4%. The study also revealed that 2.1% of the age group who were between 70 years and above are not involved in the leisure and physical activities. The majority of the respondents (42.5%) are self-employed 22.5% are unemployed, 17.7% are civil/public servants and the least of the respondents majority are retired. 4.8% of the respondents 41.3% have Higher education compared to all other levels of education. Most of the respondents who use the public spaces are educated. About 47.6% of the respondents are single and made use of the public spaces more than any other marital status. This was closely followed by 47% of the respondents who are married. Meanwhile, the monthly income of the respondents is low (< 50,000 Naira). This could be associated with the fact that the respondents who are less than < 30 years (43.4%) are self-employed with little earnings (0.3%) vocation/jobs of people and that 28.4% between 31-40 years probably used public spaces for social and economic reasons.

4.1 The environment of public spaces in the three zones

Table1 revealed the frequency distribution, percentage distribution, weighted mean score, standard deviation, and ranking of each of the variables used to determine the environment public spaces in Akure. As demonstrated in Table 1, Landscape has the highest weighted mean score of 4.110 with a standard deviation of (0.714) rated "Agreed" by the frequency and percentage distribution of 195 (58.4 per cent) and it is ranked first; followed by traffic having the value (4.096 wms; ±0.753 std) rated "Agreed" by 192 (57.5 percent) and it is ranked second, and the third-ranked variable is artificial light having the value of (4.062 wms; ±0.764 std) rated "Agreed" by 185 (55.4 percent). The least of all the variables is noise/quietness having the value of (3.876 wms; ±0.945 std) rated "Agreed" by 150 (44.9 percent). Other variables include a playground (4.054 wms; ±0.790 std) rated "Agreed" by 187 (56.0 percent); Manmade (4.029 wms; 0.680 std) rated "Agreed" by 216 (64.7 percent); Historical elements (3.982 wms; ±0.777 std) rated "Agreed" by 201 (60.2), and Natural features (3.932 wms; ±0.810 std) rated "Agreed" by the frequency and percentage distribution of 186 (55.7 percent). From the result displayed, the variables which showed more impact on the environment of public spaces include landscape area, traffic, and artificial light while the variable which shows the least factor is noise/quietness. The findings showed that the environment of public spaces in Akure is undeveloped, dirty, and disorderly. The study of Yuen (1996) posits that respondents are attracted to the parks

for their natural elements of trees, flowers and the natural environment.

	Freq	uency an	d Perce	Weighted Mean Score (WMS)					
	SD (%)	D (%)	U (%)	A (%)	SA (%)	TS	statistic	Std. dev	Rank
Landscapa area	8	15	44	195	72	1310	4.110	0.714	1
Lanuscape area	(2.4)	(4.5)	(13.2)	(58.4)	(21.6)				
Troffic	14	18	39	192	71	1290	4.096	0.753	2
ITallic	(4.2)	(5.4)	(11.7)	(57.5)	(21.3)				
Artificial light	13	18	50	185	68	1279	4.062	0.764	3
	(3.9)	(5.4)	(15.0)	(55.4)	(20.4)				
Dlauground	14	27	39	187	67	1268	4.054	0.790	4
riaygiounu	(4.2)	(8.1)	(22.7)	(56.0)	(20.1)				
Manmade	9	17	41	216	51	1285	4.029	0.680	5
features	(2.7)	(5.1)	(12.3)	(64.7)	(15.3)				
Historical	8	29	56	184	57	1255	3.982	0.777	6
elements	(2.4)	(8.7)	(16.8)	(55.1)	(17.1)				
Physical and	25	35	25	201	48	1214	3.959	0.821	7
environmental	(7.5)	(10.5)	(7.5)	(60.2)	(14.4)				
elements									
Natural	11	40	47	186	50	1226	3.932	0.810	8
features	(3.3)	(12.0)	(14.1)	(55.7)	(15.0)				
Noise/quietness	18	58	50	150	58	1174	3.876	0.945	9
Noise/quietness	(5.4)	(17.4)	(15.0)	(44.9)	(17.4)				

Table 1: Analysis of the Environment of NPS

Where SA indicates strongly agreed; A - agreed; U - undecided; D - Disagreed; and SD - strongly disagreed, wms – weighted mean score, Std. dev – Standard deviation.



Plate 1: Democracy Park, Oba-Adesida Road, Akure



Plate 2: Games Reserve Amusement Park, Ikota, Ijare Road



Plate 3: Oyemekun Rocks

4.2 City Image

City image was measured using five categories of variables namely harmony, balance, rhythm, variety, and proportion. These variables were used to represent the city image. For each of the variables, the images are shown in five different categories which include: Plate 1-4 above. The results of the analysis show the frequency distribution, percentage distribution, total score, weighted mean score, and standard deviation as indicated in Table 2.

On harmony, image 3 has the highest weighted mean score with the value of 3.49 and the standard deviation of (1.089) being regarded as "harmony" by the frequency and percentage distribution of 106 (31.7 percent) and it is ranked first. It is followed by image 4 (3.45 wms; 1.318 std) rated "no harmony" by the frequency and percentage distribution of 100 (29.9 percent); Image 5 (3.13 wms; 1.192 std) rated "No harmony" by 100 (29.9 percent); Image 2 (2.66 wms; 1.016 std) rated "less harmony" by 170 (50.9 percent), and image 1 (1.85 wms; 0.720 std) rated "no harmony" by 180 (53.9

percent). For balance, Image 2 is rated the highest weighted mean score of all the variables with the value of (3.61) and the standard deviation of (1.316 std) rated "no balance" by the frequency and percentage distribution of 90 (26.9 percent); image 4 (3.34 wms; 1.296 std) rated "less balance" by 94 (28.1 percent); Image 3 (3.10 wms; 1.151 std) rated "less balance" by 117 (35.0 percent); Image 1 (2.83 wms; 1.153 std) rated "less balance" by 119 (35.6 percent), and image 5 (2.71 wms; 1.063 std) rated "less balance" by 111 (33.2 percent). For rhythm, Image 4 is rated as the highest weighted mean value among the five (5) variables used to measure rhythm. It is shown that the rhythm of image 4 has (3.64 wms) and the standard deviation of 1.354 rated "no rhythm" by 87 (26.0 per cent). it is followed by Image 3 having the value (3.60 wms; 1.276 std) rated "less rhythm" by 92 (27.5 percent); image 5 (3.45 wms; 1.190 std) rated "rhythm" by 88 (26.3); image 1 (3.10 wms; 1.121 std) rated "no rhythm" by 113 (33.8 percent), and image 2 (2.23 wms; 0.877 std) rated "less rhythm" by 192 (57.5 percent). For variety, Image 4 is rated first and it has the highest weighted mean score

among the images of variety used to measure the city image. Image 4 shows the value (3.52 wms; 1.154 std) rated "less variety" by 104(31.1 percent); image 3 (3.32 wms; 1.116 std) rated "undecided" by 120 (35.9 percent); image 5 (3.22 wms; 1.365 std) rated "no variety" by 114 (34.1 percent); image 1 (3.08 wms; 1.289 std) rated "no variety" by 133 (39.8 percent), and image 2 is rated the least of all the five variables of variety with the value (2.64 wms; 1.060 std) rated "101" by the frequency and percentage distribution of 101 (30.2 percent). For proportion, image 3 is rated the highest of the weighted mean score with a value of 3.53 and the standard deviation of (1.218) rated "less proportion" frequency by the and percentage distribution of 97 (29.0 percent); followed by image 4 (3.30 wms; 1.097 std) rated "proportion" by 100 (29.9 percent); image 1 (3.27 wms; 1.094 std) rated "proportion" by 110 (32.9); image 2 (3.11; 1.021 std) rated "undecided" by 110 (32.9 percent), and image 5 (2.25 wms; 0.926 std) rated "less proportion" by the frequency and percentage distribution of 151 (45.2 percent). The result proves that the city image is seen from different perspectives and views. The view of the respondent is quite different from each other. Though the result can be more clearly seen from the perspective of having less harmony, less balanced, less rhythm, and less variety, the proportion of city image in Akure, Ondo State, Nigeria, the study by Yoseh (2018) affirms that imageability of amenities in public space setting is not distributed in rhyme, unity and order.

Meanwhile, the average value of all the images is used to determine each of the variables of the city image as shown in Table 2 and figure 5. The variables obtain

for harmony, balance; variety, rhythm, and proportion are represented graphically. It is shown that the highest value of the city image is rhythm with the value of (3.204), followed by variety (3.156); the third-rated is balance (3.118), the fourth is the proportion (3.092), and the last variable is a harmony (2.916). The appearance of an object depends on the environmental image that the observers see and as it is arranged in elements. City form can be organized into distinct elements for ease of recognition, such as harmony, balance; variety, rhythm, and proportion, these are the tools to analyse the qualities of public spaces in Akure. The image parameters measured with the tools of the principle of design mentioned above are the spaces, greenery, variety, landscape, parking, outdoor furniture and comfort. It is important to analyse the public spaces' influences on society taking into account the interpretation of the mental image form by users.

The findings reveal that there is no harmony of elements in public spaces in Akure, the totality of the physical environment in terms of greenery and other physical facilities are disarray, scattered and unkempt, in Adejumo and Adebamowo (2012) noted that harmony in the environment is based on wholeness with nature through a continuous flow of interaction between principles and city form. Further findings reveal that public spaces are not well developed, planned and lack basic artistic features and as such do not attract users.

Zagrob, Szczepanska, and Senetra, (2020) posit that orderly and harmonious planning of public spaces considerably influences the perception of space aesthetics and attractiveness of public spaces Zagrob, Szczepanska, and Senetra, (2020) further findings reveal a lack of proportion in the

elements found in public spaces in the zones, to height, scale and combinations of physical features. Also noticed is a lack of balance in the visual arrangement of form that can arouse a sense of balance in viewers. Balance in the image can be evaluated based on the visual distribution of the weight of the elements.

	¥ 2					Weighted Mean Score (WMS)			
Variables	Freque	ncy and Pe	rcentage	TS	Statistic	Std. dev	Rank		
Harmony	NH	LH	U	Н	GH		2.916		5
Image 1	180 (53.9)	120 (35.9)	34 (10.2)	0 (0.0)	0 (0.0)	522	1.85	0.720	5
Image 2	72 (21.6)	170 (50.9)	35 (10.5)	57 (17.1)	0 (0.0)	745	2.66	1.016	4
Image 3	51 (15.3)	76 (22.8)	69 (20.7)	106 (31.7)	32 (9.6)	994	3.49	1.089	1
Image 4	100 (29.9)	79 (23.7)	27 (8.1)	87 (26.0)	41 (12.3)	892	3.45	1.318	2
Image 5	100 (29.9)	88 (26.3)	44 (13.2)	89 (26.6)	13 (3.9)	829	3.13	1.192	3
Balance	NB	LB	U	В	VB		3.118		3
Image 1	97 (29.0)	119 (35.6)	57 (17.1)	51 (15.3)	10 (3.0)	760	2.83	1.153	4
Image 2	90 (26.9)	73 (21.9)	32 (9.6)	81 (24.3)	58 (17.4)	946	3.61	1.316	1
Image 3	77 (23.1)	117 (35.0)	38 (11.4)	91 (27.2)	11 (3.3)	844	3.10	1.151	3
Image 4	91 (27.2)	94 (28.1)	35 (10.5)	79 (23.7)	35 (10.5)	875	3.34	1.296	2
Image 5	109 (32.6)	111 (33.2)	57 (17.1)	57 (17.1)	0 (0.0)	730	2.71	1.063	5
Rhythm	NR	LR	U	R	VR		3.204		1
Image 1	113 (33.8)	46 (13.8)	90 (26.9)	75 (22.5)	10 (3.0)	825	3.10	1.121	4
Image 2	83 (24.9)	192 (57.5)	34 (10.2)	25 (7.5)	0 (0.0)	669	2.23	0.877	5

Table 2:	Descript	ive statis	tics on	city in	nage
I abit 2.	Descript	ive statis	uits on	city m	lagu

Adegunloye O.O.	1, Folorunso	C.O.2, Taiwo,	A.A.3, and A	degbehingb	e, V.O		CJRBE (2022)	10(1) 70-87	
Image 3	59 (17.7)	92 (27.5)	57 (17.1)	62 (18.6)	64 (19.2)	982	3.60	1.276	2
Image 4	87 (26.0)	86 (25.7)	21 (6.3)	75 (22.5)	65 (19.5)	947	3.64	1.354	1
Image 5	87 (26.0)	54 (16.2)	70 (21.0)	88 (26.3)	35 (10.5)	932	3.45	1.190	3
Variety	NV	LV	U	V	GV		3.156		2
Image 1	133 (39.8)	57 (17.1)	65 (19.5)	58 (17.4)	21 (6.3)	779	3.08	1.289	4
Image 2	101 (30.2)	135 (40.4)	46 (13.8)	51 (15.3)	1 (0.3)	718	2.64	1.060	5
Image 3	48 (14.4)	81 (24.3)	120 (35.9)	49 (14.7)	36 (10.8)	946	3.32	1.116	2
Image 4	54 (16.2)	104 (31.1)	17 (5.1)	127 (38.0)	32 (9.6)	981	3.52	1.154	1
Image 5	114 (34.1)	77 (23.1)	60 (18.0)	44 (13.2)	39 (11.7)	819	3.22	1.365	3
Proportion	NP	LP	U	Р	VP		3.092		4
Image 1	87 (26.0)	65 (19.5)	61 (18.3)	110 (32.9)	11 (3.3)	895	3.27	1.094	3
Image 2	75 (22.5)	69 (20.7)	110 (32.9)	70 (32.9)	10 (3.0)	873	3.11	1.021	4
Image 3	57 (17.1)	97 (29.0)	45 (13.5)	88 (26.3)	47 (14.1)	973	3.53	1.218	1
Image 4	76 (22.8)	70 (21.0)	71 (21.3)	100 (29.9)	17 (5.1)	914	3.30	1.097	2
Image 5	124 (37.1)	151 (45.2)	38 (11.4)	21 (6.3)	0 (0.0)	624	2.25	0.926	5





4.2 Relationship between Environment of Public Spaces and City image

The individual correlation of the city image and the environmental public spaces is analysed using the Kendall tau correlation. The results of the analysis shown in Table 4 indicate the variables that are significant P-value < 0.01, 0.05,at and 0.1 respectively. As displayed, the analysis reveals that there is а significant relationship between city image and the environment of public spaces (physical and environmental elements; natural features; manmade features. artificial light, landscape area. historical elements, playground, noise/quietness control, and traffic).

The result of the Kendall tau correlation coefficient and the p-value reveal for each of the variable shows physical and environmental elements ($\tau = 0.311$; p = 0.001); natural features ($\tau = -0.280$; p =

0.401); playground ($\tau = 0.035$; p = 0.408); noise/quietness control ($\tau = 0.047$; p = 0.418), and traffic ($\tau = -0.048$; p = 0.259). Meanwhile, the variable of the environment of public spaces is significant among each other, findings revealed that respondents agreed to the facts that natural and manmade features, artificial light and landscaped areas are essential elements to consider in public spaces, the study of Javadi (2016) posit that natural and artificial elements are important in the beautification of the public spaces. the importance of natural features in public spaces, Jahdi, and Khanmohamadi (2013) noted that the natural environment promotes health and wellness, and also that clean and healthy spaces encourage people to walk and spend leisure-time in landscape/green areas. Guedoudj, et al (2020) noted that the components of the physical environment

0.000); manmade features ($\tau = 0.323$; p =

0.000); artificial light ($\tau = -0.242$; p = 0.025); landscape area ($\tau - 0.044$; p =

0.302); historical elements ($\tau = 0.036$; p =

(natural and manmade) directly influence the attractiveness of public spaces.

4.3 Testing of Hypothesis

Kendall-tau b correlation analysis is conducted to determine the relationship between city image and the environment of the public spaces. The null hypothesis states that there is no statistically significant relationship between the environment of public spaces and city image and the decision rule state that if Pvalue < 0.05 (5% significance level), reject the null hypothesis, otherwise, do not reject the null hypothesis.

From the result of the analysis, the null hypothesis is rejected at a P-value < 0.000(Table 3) and the study conclude that there is a statistically significant relationship between the environment of public spaces and the city image with a P-value of (0.000). This implies that the environment of the public spaces does affect the city's image. The image of the city is the representation of the city environment, its landscape and spaces, to achieve a distinctive image of the city, special consideration must be given to the public spaces in the city and the surrounding, Pompe (2019) posit that the metropolitan environment contributes to a desire city image.

Table 3: Test of Hypothesis

	Т	P- value	Remarks
City Image	0.312	0.000	reject the null hypothesis

Where *** indicates P-value < 0.01, ** indicates P-value < 0.05, and * indicates P-value < 0.1.

	City image	Physical and environmenta	Natural features	Manmad e features	Artificia l light	Landscap e Area	Historica l elements	Playgroun d	Noise/quietnes s control	Traffic
City image	1.000	reichients					ciements			
Physical and environmental elements	0.014 (0.747)	1.000								
Natural features	-0.13 (0.765)	0.389*** (0.000)	1.000							
Manmade features	0.016 (0.712)	0.278*** (0.000)	0.378** * (0.000)	1.000						
Artificial light	-0.002 (0.963)	0.267*** (0.000)	0.311** * (0.000)	0.320*** (0.0000)	1.000					
Landscape Area	0.044 (0.302)	0.247*** (0.000)	0.399** * (0.000)	0.363*** (0.000)	0.301*** (0.000)	1.000				
Historical elements	0.036 (0.401)	0.097** (0.000)	0.248** * (0.000)	0.225*** (0.000)	0.190*** (0.000)	0.361*** (0.000)	1.000			
Playground	0.035 (0.408)	0.108** (0.023)	0.224** * (0.000)	0.255*** (0.000)	0.247*** (0.000)	0.332*** (0.000)	0.370*** (0.000)	1.000		
Noise/quietne ss control	0.027 (0.518)	0.060 (0.199)	0.114** (0.015)	0.207*** (0.000)	0.192*** (0.000)	0.248*** (0.000)	0.359*** (0.000)	0.407*** (0.000)	1.000	
Traffic	-0.048 (0.259)	0.128*** (0.008)	0.233** * (0.000)	0.289*** (0.000)	0.243*** (0.000)	0.344*** (0.000)	0.246*** (0.000)	0.447*** (0.000)	0.429*** (0.000)	1.000

Table 4: Correlation Analysis between Environment of NPS and City image

Where *** indicates P-value < 0.01 (1% significance level); ** indicates P-value < 0.05 (5% significance level), and * indicates P-value < 0.1 (10% significance level).

5.0 Conclusion and

Recommendations

From the discussions, it is clear that there is a relationship between public spaces and city image. The physical tangible elements to measure in a city image are the visual evaluation of its attributes as observed by the users. The image of a place plays a significant role in attracting visitors and other interested individuals, though the image of the city is subjective to measure. the image parameter, harmony was used to measure the image of public spaces; harmony describes the visually satisfying effect of combining similar or related elements. Elements to be combined with, adjacent colours or into similar shapes, the findings from the study reveal "No harmony". Another parameter, balance, which is the distribution of visual weight in artwork or image, was also measured. Balance describes the visual composition of the element. Balance can be symmetrical or asymmetrical. In symmetrical, one side of the image is a mirror image of the other, Toscano and Holmes (2017). In symmetrical balance. elements are arranged the same or very similar on either side of a central axis, the findings from the zones reveal "No balance". The overall findings on the five parameters used reveal, No harmony, no balance, no variety, no rhythm and no proportion of the physical elements of the public spaces. It is pertinent to conclude that the visual perception of the environment of public spaces affects the quality of life of city inhabitants, presence of green area to replace the undeveloped and dirty environment of public spaces increase the aesthetic image quality of the urban environment Carmona (2019). If the physical environments of public spaces are improved on, it will subsequently reflect on the overall image of the city. The findings showed that the environment of public spaces in Akure is undeveloped, dirty, and disorderly. Also natural and manmade features, artificial light and landscaped areas are essential elements to consider in public spaces development and planning. The image of the city is the representation of the city environment, its landscape and spaces, to achieve a distinctive image of the city. Therefore, special consideration must be given to the public spaces in the city and the surroundings.

Reference

- Carmona, M. (2010). Contemporary Pubic Space, Part two: Classification. Journal of Urban Design. 5(22). 157-173.
- Carmona, M and De Magalhaes, C. (2016). Public Space Management. Present and Potential. Journal of Environmental Planning and Management. 49(1).75-99.
- Carmona, M. (2019). Place value: place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*. 24(1). 1-48, DO1: 1080/13574809.2018.1472523
- Carrera, F. (1998). *The Image of a Good City*. MIT 11.947 Seminar, Massachusetts Institute of Technology.
- Chitrakar, R.M. (2016). Meaning of Public Space and Sense of Community: The Case of New Neighbourhoods in Kathmandu Valley. *International Journal of Architectural Research*. Archnet-IJAR. 10(1), 213-227.

- Chitrakar, R.M. Baker, D.C. and Guaralda, M. (2017). Emerging Challenges in the Management of Contemporary Public Spaces in Urban Neighbourhoods. International Journal of Architecture Research. 11(1). 1-15
- Chitrakar, R.M. Baker, D.C. and Guaralda, M. (2017). Changing Provision and Use of Neighbourhood Public Space in Nepal's Kathmandu Valley. *Journal of Architecture* and Urbanism. 41(1). 46-59.
- Gehl, J. Gemzoe, L. Rogers, R. (2008). New City Spaces. Washington, Dc: Island Press
- W. Ghenouchi, Guedoudj, A. and Toussaint. (2020).Urban J Attractiveness in Public Squares: The Mutual Influence of the Urban Environment and the Social Activities in Batna. Scientific Article. Urbe.Revista Brasileira de Gestao Urbana, 12
- Jahdi, R. and Khanmohamadi, R. (2013). Residents and Urban Green Spaces: A Case study in Raht (North Iran). *African Journal of Agricultural Research*. 8(23). 2918-2923.
- Javadi H. (2016): Sustainable Urban Public Squares. European Journal of Sustainable Development. 5(3). 361-370.
- Kelly, A. (2001). *Building legible Cities*. Bristol Cultural Development Council.
- Koseoglu, E. and Onder, D.E. (2011). Subjective and Objective

Dimensions of Spatial Legibility. Proceedia- *Social and Behavioural Sciences*. 10, 191-198.

- Kostrzewska, M. (2017). Activating Public Space: How to Promote Physical Activity in Urban Environment. IOP Conf. Series: *Materials Science and Engineering*.
- Lemberg, G. (2010): Environmental Perception in B Warf. (Ed) Encyclopedia of Geography Sage, Thousand Oaks.
- Lynch, K. (1960). *The Image of the City*. Cambridge Massachusetts. MIT Press.
- Madanipour, A.(2003). Public Spaces of the City: London. Routledge.
- Madanipour, A. (2004). Marginal Public Spaces in European Cities. *Journal* of Urban Design. 9(3), 267-286.
- Mehta, V. (2014). Evaluating Public Spaces. Journal of Urban Spaces. 19(1), 52-88.
- Montgomery, J. (1998). Making a City, Urbanity, Vitality and Urban Design, *Journal of Urban Design*. 3(1). 93-116.
- Moulay, A and Ujang, N. (2016). Legibility of Neighbourhood Parks and its Impact on Social Interaction in a Planned Residential area. Archnet-IJAR. 10(1). 186-194.
- Nasution, A.D. and Zahrah, W. (2014). Community Perception of Open Space and Quality of Life in Median, Indonesia. *Procedia:*

Social and Behavioural Science Ravazzoli, E. and Torricelli, G.P. (2017). Urban Mobility and Public Space. A Challenge for 153, 585-945.

- Neacşu, M.C. (2009). The City Image and the Local Public Administration: A Working Tool in Urban Planninguthasupa, S. (2012). The Portrayal of a City's Transylvanian Review of Administrative Review. 172-188.
- Newton, R. (2009): The Promotion of Liveable Neighbourhood within Los Angeles Planning Process. Urban and Environmental Policy Senior Comprehensive Project Occidental College.
- Pallasmaa, J. (2005). The Eyes of the Skin: Architecture and the Senses. Chichester. Wiley and Son.
- Perovic, S. and Folic, N.K. (2012). Visual Perception of Public Open Spacesilmaz, S. and Mumcus, S. (2016). Urban Green in Niksic. Social and Behavioural sciences. 68, 921-933.
- Polska, A. (2017). The function of Centres of Activity in the Shaping of Public Spaces in Lublin. Habitat III Issue papers.11.
- Pompe, A. (2019). Designing the Image and the Perception of the City and its brand. The Importance and Impact of Qualitative Urbanistic Elements. Advance in Businessyuen, B. (1996): Use and Experience of Related Scientific Research Journal. 10(2)
- Ramlee M, Omar, D Yunus, R.M and Samadi, Z.(2015). Successful Attractions of Public mudzinska, N.M. Space through Users Perception. Environmental -behaviour proceedings journal. 1(2). 188-196

the Sustainable Liveable City of the Future. The Journal of Public Space, 2(2), 37-50. Image by Young People. Asia Pacific

International Conference on Environment-Behaviour Studies, Grand Margherita Hotel, Kuching, Sarawak, Malaysia, 709. December 2010. Procedia- Social and Behavioural Science. Elsevier publications, 38(2), 284-

Toscano, K. and Holmes M.V. (2017): Homeowner Garden design series: Elements principles of design. Oklahoma and Cooperative Extension Service. Available at: http://osufacts.olstate.edu. Accessed 13th May 2021

Area and Design Principles. Environmental Sustainability and Landscape management. Pp.100-118. ST. KLIMENT OHRIDSKI **UNIVERSITY PRESS.**

- Yoseph, El-Sayed. (2018): Measuring Public Spaces Identity in Jeddah- Corniche. Architecture and Planning Journal (APJ). Vol 24 (1).
 - Neighbourhood Parks in Singapore. Journal of Leisure Research. 28(4). 293-311.

(2003). Searching for Legibility City Form: Kelvin Lynch's Theory in Contemporary Perspective. Journal of Urban Technology, 10(3). 19-39.