

Influence of Perception on the Use of Public Parks for Recreation in Makurdi, Benue State, Nigeria

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ABSTRACT : Preliminary empirical assessment of parks in Makurdi indicates that park use is declining. This decline manifests in abandonment of existing parks which has led to physical deterioration of facilities in parks, control of public parks by private interests and transformation of park space into criminal hideouts. Literature suggests that use of space is influenced by many factors one of which is perception. This study sets out to investigate public perception of parks in Makurdi. The population of Makurdi was determined by projecting the population data for Makurdi from 2006 to 2016. The Taro Yamane formula was used to determine a sample size of 400 from the population figure. Neighbourhoods surrounding parks such as Lobi quarters, Old G.R.A, Kwararafa quarters, Ankpa quarters, Highlevel, Low level, Wurukum and Nyiman were adopted as units for data collection. Maps of each neighborhood were digitized and individual houses numbered on the map. A table of random numbers was then applied to determine the number of houses from which information was sought. Perceptual and demographic information was sourced through questionnaire administration and findings were analyzed using SPSS software and generated in percentages to present findings. Findings showed parks were perceived as a means of recreation and an avenue to strengthen social ties however, Insecurity, and poor park facilities were the major factors limiting people from optimal use of these parks. It is recommended that more attention be focused on the parks in terms of their management, nature and quality of services provided, improving on the physical structures and enhancing the security and overall feasibility.

Keyword: Parks, Perception, Utilization, Recreation, Makurdi

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I. INTRODUCTION

Perception is defined as our way of recognizing and interpreting information that we have gathered through our senses [1]. It goes further to include how we respond to the information. It can be thought to be a process where we take in sensory information from our environment and use it in order to interact with our environment thereby converting the information into something useful [2]. It is the result of a filtering process performed by an individual when basic elements of the external environment like lines, shapes, edges or colors gathered by the senses are filtered in the mind of a person to form an opinion that is further expressed in behavior. The four senses of sight, smell, hearing and touch gather stimuli from the external environments. This stimulus is then transferred to the brain through nerve cells. The brain works in synergy with the senses, nerves and the spinal cord. The senses act as stimuli collectors, nerves act as receptors and transmitters while the spinal cord coordinates action or reaction impulses, thus everything one does, thinks or feels and ultimately behavior can be linked to this synergy [3]. The senses gather information from the external environment (perception) to the brain via the nerve cells, which then filter and process the information and send back a reaction or an action to be carried out with the help of the spinal cord. Perception is at the core of environmental behavior because it is the store house of the interaction that occurs between humans and the external environment [4]. The external environment is the greatest source of stimulus. A person's perception of the external environment is known as a mental map [5]. A mental map is an individual's own map of their known world created and viewed differently by each individual. Environmental images/mental maps are defined as is the quality of physical object (environment), which gives an observer a strong vivid image [6]. Mental maps of individuals can be

investigated [6], each individual holds a unique image of his or her city, a visual representation that guides through daily life and maps out meaning. Perception or environmental images can be socially and culturally learnt because how individuals filter, react to, organize and value environmental stimulus differs. Differences in environmental perception depend on factors such as age, gender, ethnicity, lifestyle, length of stay in an area, physical, cultural, social environment [7]. However, similarities in socialization, past experience and prevailing urban environment mean that certain aspects of environmental imagery can be generalized by people in common urban environments [3] especially public social environments that are public and accessible freely by all in the society. Understanding and measuring these environmental imageries are central to the study of environmental perception in urban design. This is because these measurements form a data base for evaluation of urban designs and strengthening theories of environmental perception. This is especially true for public spaces such as parks meant for common or public use that serve a vital function of recreation. Ideally, formal recreational needs of people in an urban area are primarily expected to be met in areas like parks, stadia, green spaces, gardens, civic centers, museums, theatres, botanical and zoological gardens. These areas are designated as public space and should be accessible to all and sundry [7]. This study however limits its focus to parks because in urban areas parks exist at the neighborhood and even pocket level. They are thus closer to the people than all the other recreation areas. Also, the range of activities provided in parks caters to all ages and so it is assumed that parks where they exist should be magnets for both children and adults. Being that park space is attractive to a broader spectrum of the society, this study presupposes that park use is most indicative as a choice for recreation in an urban setting. Studies have shown park use as beneficial for physical exercise [8]; Social interaction and community cohesion [9], [10], [11],[12]; Community identity [13]. Despite these benefits, studies have also shown negative perception of park management, park activities, security and the park environment to hinder the use of parks [14]. Behavior in a spatial environment is dependent on how the environment is perceived. It has been asserted that city performance can be measured solely by reference to the spatial form of the city [6]. But, the quality of a place is due to the joint effect of the place and society which occupies it. Therefore for design of the spatial environment to be effective and efficient, planners must understand how the people they are planning for perceive their surrounding environment.

II. PROBLEM ANALYSIS

Makurdi town has many public spaces such as public squares, stadia, zoological gardens and parks. The city has 8 neighborhood parks; preliminary empirical assessment of these parks indicates that park use is declining as 3 out of the 8 neighborhood parks located in the city have been abandoned and even the five remaining show signs of neglect and physical deterioration. Also, it has been observed that there is a proliferation of drinking spots and restaurants in all kinds of spaces including under trees where people congregate to relax. This development portrays a disconnection between intended park use and actual uses to which parks are put which is indicative that there are gaps between the expectations of park designers and end-user perception and resulting behavior. End-user behavior in spatial environments can be influenced by many factors; however this study links end-user behavior to the perception of the end-users and aims to answer the following questions; how do people perceive public parks? In what ways are parks being used? What activities do people engage in for formal recreation? What features of the space attracts people to them for relaxation? Are parks as they exist feasible or practical in urban centers in Nigeria? This study puts forward the argument that the use of parks as a community choice for recreation is demonstrated in the behavior of the community. Therefore parks may not be an option for recreation as perceived by the community.

III. AIMS AND OBJECTIVES

The study set out to investigate the influence of perception on the use of parks in Makurdi. This information is pertinent in planning and evaluating the performance and hence viability of public spaces such as parks in the city. The study specifically set to achieve the following objectives:

1. To carry out a perceptual audit of parks in Makurdi.
2. To examine the pattern of activities in Makurdi parks.
3. To assess activities residents prefer for formal relaxation in Makurdi.
4. To assess the features of spaces used for relaxation that are attractive to residents in Makurdi
5. To determine the feasibility of parks for recreation as they exist in Makurdi.

IV. STUDY AREA

Makurdi urban area typifies many cities in Nigeria, a developing country in the global economic south. The city has its beginnings as a fishing settlement at the turn of the century. Makurdi traces accelerated spatial dispersion to the colonial administration. Most of the city and public spaces were laid out during that era. The city has expanded spatially and changed status over the years. Today it is the capital city of Benue State with a population of 297,398 National Population Census (2006). Makurdi is located in the Middle Belt of Nigeria

between latitudes $7^{\circ}37'$ and $7^{\circ}47'$ North of the equator and longitude $8^{\circ}27'$ and $8^{\circ}40'$ east. Makurdi as it was originally planned by the colonialists was divided into the European Reserved Areas and the native areas. As the city continually developed various wards and neighborhoods were formed and now exist. The city is well networked in terms of transportation routes and is positioned as the gateway between the north and the south of the country with the river Benue as the dividing line and landmark. Infrastructural development has not matched increased demographic and spatial growth but the city has potential for development. Makurdi has 8 parks located in different parts of the city. Only 5 out of the 8 are functional 3 have been abandoned. Out of the 5, one has been converted to an events center where wedding receptions, corporate luncheons and other similar informal/semi-formal occasions take place.

V. METHODOLOGY

Data Needs

Information that was relevant to the study included; location of parks in Makurdi by maps, the various kinds of activities occurring in the parks and the perception of parks by residents of Makurdi urban area. This information was sourced through observation and conducting of interviews. Other information such as park use and perception of residents of Makurdi about park space was obtained through questionnaire administration. All the needed data were gathered using maps, sketches and data from questionnaire administered.

Methods Of Data Analysis

Units of data analysis included neighborhoods surrounding parks. Google imageries of the chosen neighborhoods were retrieved and re-digitized. All the houses within the neighborhood were numbered on the maps; a table of random numbers was applied to the houses to choose the individual households to be questioned based on their numbers on the map. In the household one adult was chosen to fill out the questionnaire which was to make use of a likert scale to measure perception.

Sample size

Taro Yamane formula was applied to the projected population census figures of Makurdi to yield a sample figure of 400 respondents. The figure was divided equally among the chosen neighborhoods (Lobi quarters, Old GRA, Kwararafa quarters, Ankpa quarters, High level, Low level, Wurukum and Nyiman) to arrive at 50 respondents per neighborhood.

Analysis technique

Data derived from the questionnaire were run through the SPSS software and frequency and percentage tabulations were generated on each major variable as these were descriptive in nature. To determine feasibility of park provision in the town, The Likert scale was used to determine the level of acceptability, demand and functionality of parks in Makurdi by respondents. This adapted indices [15] attempts to answer the questions feasibility studies seek to find (Can it work? Does it work? Will it work?).

VI. RESEARCH FINDINGS

Age and Sex of Respondents

77% of respondents were male while 23% were made up of female respondents, meanwhile residents under the age of 30 constituted the highest population (40.5%) followed by those between the ages of 31 and 40 (30.3%). Those between the ages of 61 and 70 and those above the age of 70 constituted the least percentage (14% and 1% respectively). 53% of the respondents were single while 41% were married (see figure 1). 91% of the respondents were Christians, 36% practiced Islam and no other religion was observed to be practiced within this demographic.

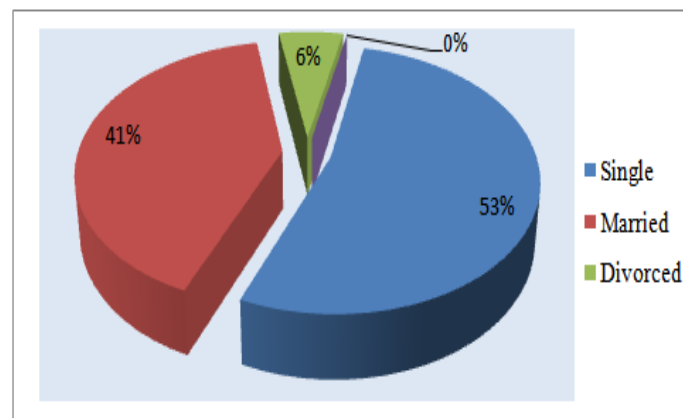


Fig 1: Marital Status of Respondents

Source: Authors' field survey (2017)

Ethnicity of Respondents

The highest ethnic majority amongst the respondents from the highest included Tiv, Idoma and Igbo respectively (figure 2).

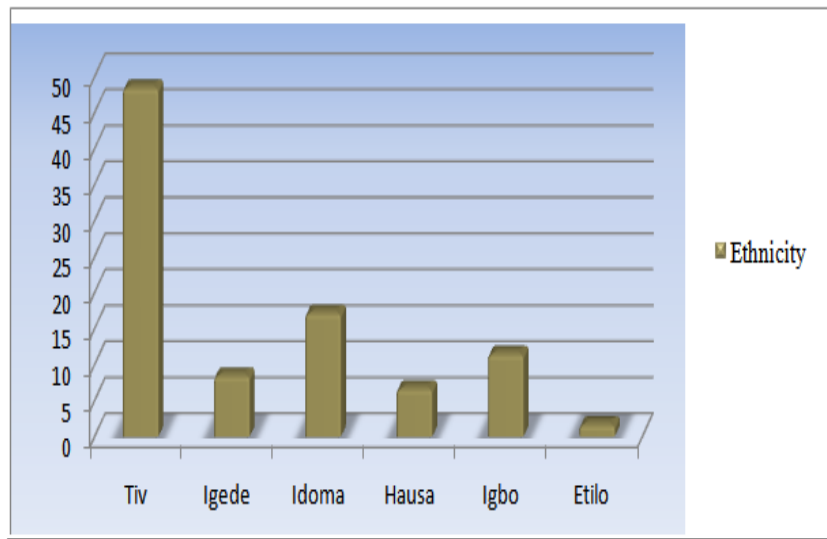


Fig 2: Ethnicity of Respondents

Source: Authors’ field survey (2017)

6.3 Educational Level of Respondents

The level of education of respondents was ascertained and respondents who had attained tertiary education recorded the highest number of the population (51%), closely followed by those with only Secondary School certification (32%) as shown in figure 3.

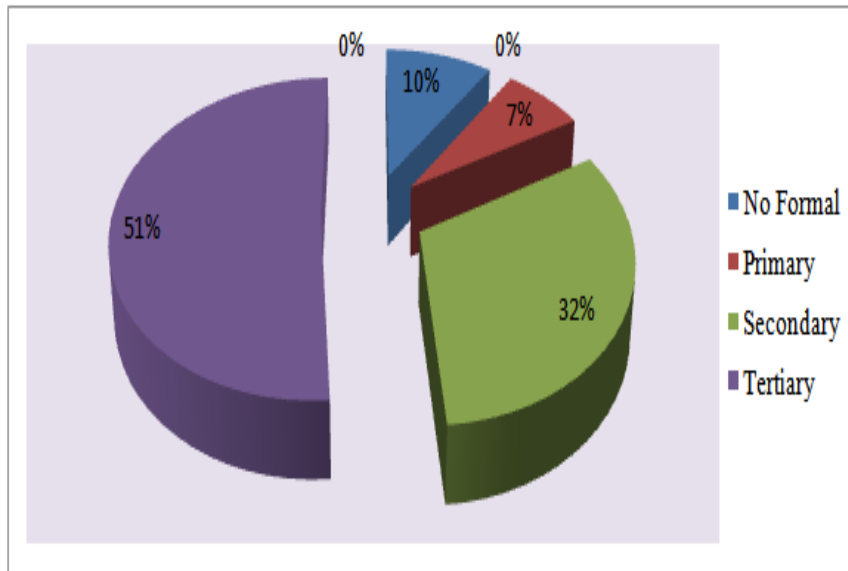


Fig 3: Educational Level of Respondents

Source: Authors’ field survey (2017)

6.4 Occupation of Respondents

30.5% of respondents were traders which constituted the majority of the population while 23.5% of respondents were civil servants. Those engaged in farming and carpentry activities took up 10.8% and 9.8% of the population of respondents respectively (figure 4).

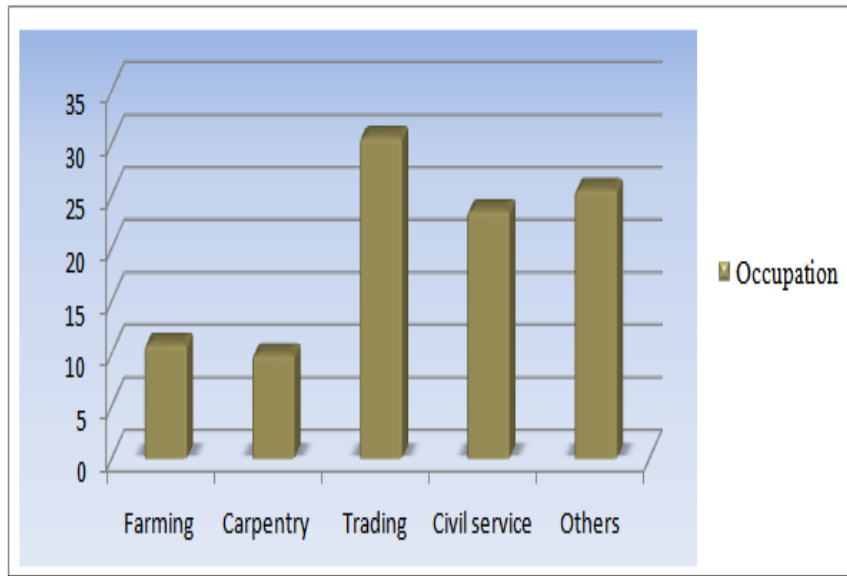


Fig 4: Occupation of Respondents

Source: Authors’ field survey (2017)

6.5 Preferred Place of Relaxation by Makurdi Residents

The study revealed that major places of preference for relaxation for residents were majorly recreation parks, beer palours, and small makeshift drinking spots usually under the shade of a tree. It showed that 34% of respondents preferred to patronize recreation parks, 30% preferred beer palours and 25% preferred to sit out at a “joint” under the shade of a tree (figure 5).

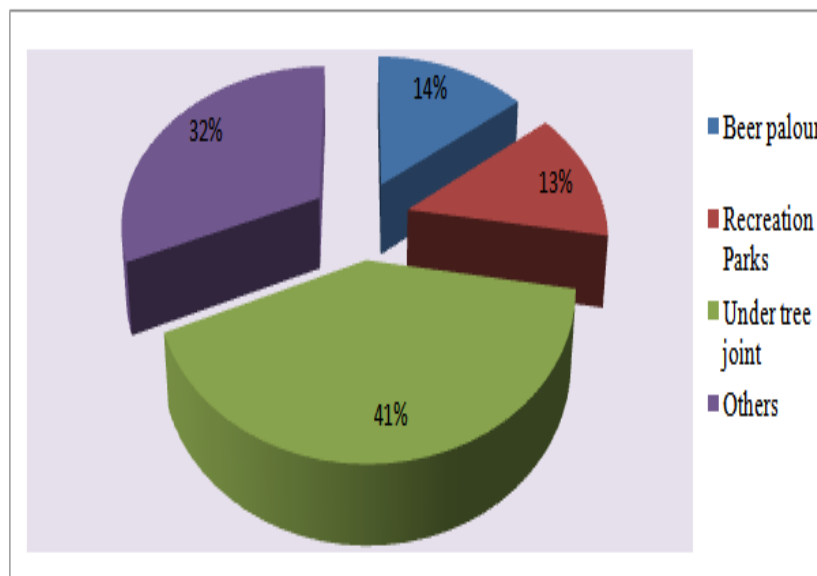


Fig 5: Preferred Place of Relaxation by Makurdi Residents

Source: Authors’ field survey (2017)

6.6 Reason for the Choice of Preferred Park for Relaxation

The study shows that peers/ friends’ influence was a major reason for preferred choice with 29% patronizing preferred parks due to the influence of peers while 27% agreed that proximity to their homes played a major role in influencing their choice of places for relaxation. This happened to be far greater than resident’s choice of parks due to the range of services/ activities available (13%). Other reasons such as security were quite inconsequential (table 1).

Table 1: Reasons for the Choice of Preferred Place of Recreation

Variables		Frequency	Percentage	Valid percent	Cumulative percent
	Proximity to my house	109	27.3	27.4	27.4
	No Reason	21	5.3	5.3	32.7
	Peer/ friends influence	117	29.3	29.4	62.1
	The management	24	6.0	6.0	68.1
	Affordability	30	7.5	7.5	75.6
	Security	29	7.3	7.3	82.9
	Range of activities available	16	13.0	13.1	96.0
	Others	16	4.0	4.0	100.0
	Total	398	99.5	100.0	
Missing	System	2	.5		
	Total	400	100.0		

Source: Authors' field survey (2017)

6.7Types of Formal Recreational activities Makurdi Residents engage in

The various types of formal recreation available to and most often engaged in by respondents include the following shown in table 2 with two major activities taking the greater patronage (drinking alcohol and eating taking 34.3% and socializing and meeting people which consists of 30.5% of the residents).

Table2: Types of Formal Recreation

Variables		Frequency	Percentage	Valid percent	Cumulative percent
	Drinking alcohol and eating	137	34.3	34.3	34.3
	Passive games	20	5.0	5.0	39.3
	Active sports	42	10.5	10.5	49.8
	Watching nature	63	15.8	15.8	65.5
	Socializing and meeting people	122	30.6	30.3	95.8
	Watching European Football league	13	3.6	3.3	99.0
	Other activities	3	0.8	0.8	100.0
	Total	400	100.0	100.0	

Source: Authors' field survey (2017)

6.8UseofNeighbourhood Parks

While 59.6% of the respondents actually patronized the parks, 40.4% did not. Those that patronized the park on a weekly basis constituted the highest population (24.3%) followed by visitors to the parks only on festive occasions (17.8%). Monthly and daily visitors constituted only 12.5% and 5.8% respectively. Those who did not patronize the parks had several reasons why they did not. These reasons included concerns about insecurity at the parks (18.8%) and poor services (18.8%). These two factors constituted the highest percentage of respondents. Other factors included poor park activities (14.8%), distance to the park (14.2%) and absence of people at the park (12.5%). The least factors hindering patronage were the high cost of services at the park (11.4%) and religious/ traditional restrictions (9.7%)

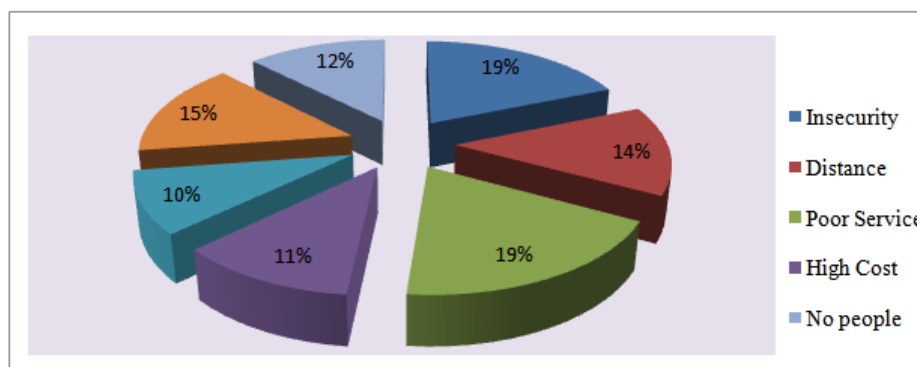


Fig 6: Reasons for not patronizing neighbourhood parks

Source: Author's field survey, 2017

When asked what they valued the most when they went out to recreate, the highest response was being in the “company of friends” (33.8%) followed by those that valued food and drinks (29.7%). Services provided and activities provided at the parks constituted 16.1% and 16.5% respectively. Other exclusive priorities constituted 3.8%.Half of the respondents would have liked to have various games/sporting activities added to the park as shown on table 3.

Table 3:Additional activities wished to be added to park activities

Variables		Frequency	Percentage	Valid percent	Cumulative percent
	Games/ sports	1158	39.5	50.8	50.8
	Singing/ Dancing	28	7.0	9.0	59.8
	Reading	23	5.8	7.4	67.2
	Watching TV	24	6.0	7.7	74.9
	Swinging	21	5.3	6.8	81.7
	Cultural reason	4	1.0	1.3	83.3
	Socializing/ Chatting	43	10.8	13.8	97.1
	Religious activities	1	0.3	0.3	97.4
	Trading	2	0.5	0.6	98.1
	Watching nature	6	1.6	1.6	99.7
	Total	311	77.8	100.0	
Missing	System	89	22.3		
	Total	400	100.0	100.0	

Source: Author’s field survey, 2017

6.9Suggested physical improvements to the park

An overwhelming 88% of the respondents viewed parks as being necessary and vital for recreational purposes as against 11%, however, to reduce the limiting factors hindering park use by respondents, 49.1% of the respondents forming the largest percentage, desired that the management of the parks be improved, 18.2% suggested an improvement in security while another 18% proposed that the surroundings, landscape and footpaths be improved instead. Other suggested improvements on the buildings/structures within the park (13.7%) other suggestions constituted a low 1.1%.

6.10Feasibility of the Parks for Recreation

Indices for feasibility cut across reactions from all stakeholders involved in the design, implementation and use of public space. (Policy makers, professionals and the public) however, this study was limited to public response in terms of acceptability, demand, and practicality.To determine the level of acceptability among respondents it was observed that a total of 40% strongly approved 28% fairly approved of the parks while 10% fairly and 5% strongly disapproved of the parks. Meanwhile, only 17% remained neutral or were indifferent to the design and provision of the parks in their neighbourhood (Figure 7). This was primarily due to the services they enjoyed at the park and the potential of the parks to provide better facilities and services.

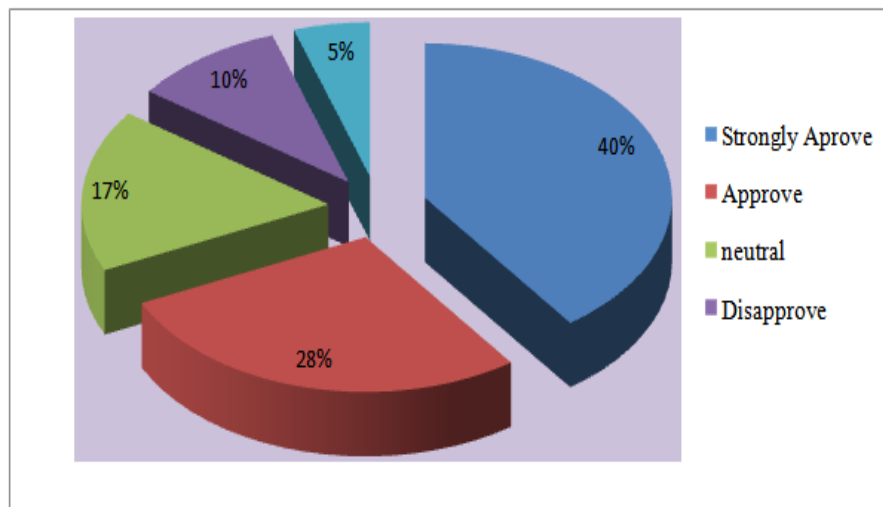


Fig 7: Acceptability of neighbourhood parks

Source: Author’s field survey, 2017

6.11 Demand for more/ future parks within and around the neighbourhoods

In terms of demand for more parks within and around the neighbourhood, 55% of the respondents supported the design and provision of more parks to meet the needs of growing populations and to create a variety of options. This was based on the conditionality that all the desired services and facilities were provided and maintained. 20% remained neutral to the idea of more parks due to their lack of active interest in patronizing parks and respondents with a low demand and no demand whatsoever constituted 17% and 8% respectively (Figure 8).

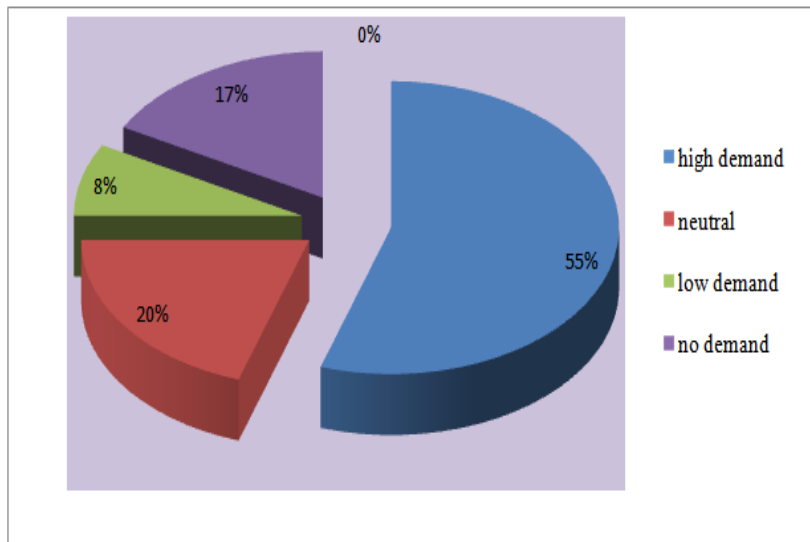


Fig 8: Demand for more parks within and around neighbourhoods

Source: Authors’ field survey (2017)

In terms of functionality amidst limited resources the study showed that 15% of the respondents perceived the parks to be very functional while the 35% agreed with the average functionality of the park. 20% viewed the parks as fairly functional and 15% comprised of respondents who voted for not functional at all due to the inactivity of parks in their areas.

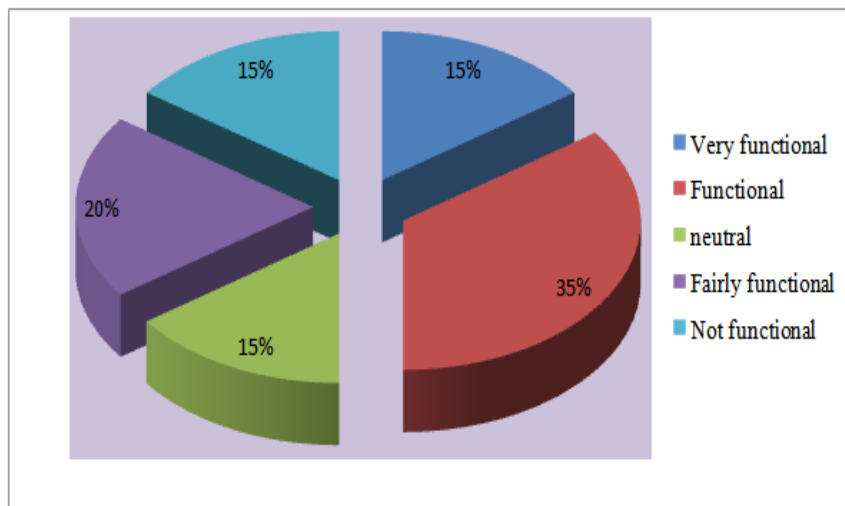


Fig 9: Functionality of Parks

Source: Authors’ field survey (2017)

VII. SUMMARY OF FINDINGS

The study revealed that most parks had a higher male patronage and a youthful set of park users (30 years and below). Most respondents had attained tertiary education. Recreation parks and beer palours/ small drinking spots were the most preferred places for relaxation and this is highly due to the influence of peers and

the proximity of the parks to the reach of the park users. Two major recreational activities that are most predominant in Makurdi include drinking, eating, socializing and meeting people. Park use is most frequent on a weekly basis by the larger population of park users.

When out to recreate at parks, users value the company of friends most, followed by food and drinks served at parks. Majority of the respondents have attached great importance to the presence of parks in the environment, however factors such as insecurity and poor park facilities have hindered a lot of residents from patronizing parks and as such suggest that the security and facilities within the parks be improved upon. Based on public acceptability, demand and functionality, design and provision of parks in Makurdi are a feasible component requiring further improvements in design, management, facilities and services.

VIII. CONCLUSION

In an attempt to investigate the influence of perception on the use of parks in Makurdi, questions were raised as to how people perceive public parks, what functions parks serve, people's common recreational activities and the overall feasibility of parks in urban centres in Nigeria. The study has proven that the perception of parks by residents to a large extent affects their use/patronage. The argument that the use of parks as a community choice for recreation is demonstrated in the behaviour of the community is very valid. That being said, the design and presentation of parks for community use determines the level of acceptance by the community. Generally the study has proven that people value the use of public parks as they see them as an avenue to strengthen social ties while temporarily breaking away from formal, daily routine activities. Due to the observations raised by existing and potential park users, it is recommended that extra attention be paid to the development of parks in terms of management of the parks, upgrading of the physical structure and improvement of the quality of services provided and provision of adequate and effective (but not intrusive) security systems within and around the parks to give visitors a general sense of safety and calm. This would not only stimulate an enhanced patronage but will also have a gradual, positive effect on the economic profile of the parks, the town and the state as a whole.

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