Analysis of the Use and Perceived Quality of Service across Selected Parks and Gardens in Port Harcourt Metropolis

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Abstract

The aim of this study was to analyze the level of use and quality of service rendered by parks and gardens in Port Harcourt Metropolis, Rivers State, Nigeria. The study evaluated the level of use and quality of service rendered by parks and gardens in Port Harcourt Metropolis. Parks and gardens help to supplement the social and psychological convenience of users such that it promotes relaxation and promote an atmosphere of relationship with natural landscape. The study adopted the cross sectional research design. Primary and secondary data were used and structured questionnaire was used to gather data. The data for this research were examined using descriptive and inferential statistical techniques. The results of the analysis were presented in tables. The results showed that there is statistically significant relationship between level of usage and quality of service (22.29, p>0.05) of parks and gardens in Port Harcourt metropolis. The most common challenges in the operation of parks and garden facilities is insecurity, poor funding and inadequate maintenance, especially the state owned parks and gardens. The study recommends that there is need for re-evaluation of the place of parks and garden in the development of the city and effective usage. Also, adequate funding and development of recreation is not only good for the economy, it is a long-term investment in the people. This will grossly affect the development, maintenance and utilization of parks and garden in the state.

Keywords: Quality of Service, Parks, Gardens, Port Harcourt Metropolis, Analysis and Use.

1. Introduction

Parks and gardens play a fundamental role in improving the quality of living in urban areas since they can produce many types of benefits for the inhabitants (Tempesta, 2015). The landscape of urban open spaces can range from playing fields to highly maintained environments to relatively natural landscapes. Parks and gardens are defined as landscapes, mostly green areas intended for social and recreational activities as well as aesthetic or display purposes. Thus, the Bureau of Municipal Research in Toronto lists these functions as the nature function, urban design function, economic function, social retreat function, and outdoor recreation function (Bureau of Municipal Research, 1976; Rahnama & Akbari, 2013).

The research examined the level of use and perceived quality of service rendered by parks and gardens in Port Harcourt. The study provided relevant information to urban planners and decision makers, in order improve the conditions and services of parks and gardens in Port Harcourt metropolis to be used optimally.
It is important to note that contact with nature is often only available via parks and gardens or other green areas. This and the need to have a venue for leisure and sports probably informed early landscape designers to design parks and gardens. In the developed countries parks and gardens and other green spaces are valued and treasured. In these climes, parks and gardens are structurally and physically planned area or environment, made-up of various facilities such as sit-out, indoor and outdoor relaxation facilities that help to supplement the social and psychological convenience of users such that it promotes relaxation, an atmosphere of relationship with natural landscape in which attractiveness, safety and accessibility of parks and green spaces contribute positively to society and the environment, improving public health, well-being and quality of life (Virtanen, 2017). Green spaces should be easily accessible, adequate in size, and close to residential areas, as the attractiveness and quality of green space is an important factor in the use of the park. Thus, quality of parks and gardens can also be judged with various attributes such as the general condition and maintenance, specific features and ‘fitness for purpose’. Every class has its own quality requirements for the types of vegetation, construction and materials (Nuotio, 2007). The problem in measuring the customer orientated quality is that it is not possible to measure it in one simple way (Virtanen, 2017), which service or product the customer chooses is not based purely on the quality of the service or product because other factors, such as age, gender, their own experiences and also other people’s opinions and experiences play a role as well (Lillrank 1998).

Parks and green areas are used by very different people: children, young adults, elderly, people with dogs, joggers etc. Expectations for the use and quality of green areas may be very different amongst these different user groups. For instance in Finland, both private and public green space maintenance has been based on Green Area Maintenance Classification since 1993 (Virtanen, 2017). Quality parks are reported as one of the top three reasons that business cite in relocation decisions in a number of studies in Finland. Parks generate money for the local economy (National Recreation and Park Association, 2016).

Port Harcourt in Rivers State of Nigeria at its inception was well planned, paradoxically, this status has been lost as most of the green built which served as resting places and recreational grounds have been destroyed and displaced. The question of non-use or under-use of urban parks is a major problem. It was reported in Veal (2006) that successful, neighbourhood parks complement the activity patterns of people living and/or
working in immediately adjacent built-up areas and that the absence of such complementarily results in parks which are unused or under-used and tend to become neglected.

Most parks are underutilized or unused by a majority of the population they were intended to serve (Gold, 1980). How parks are used is conditioned by the development of living standards, the busy lifestyle and recreational needs of the urban population (Atmis, Batuhan, Yücedag, & Lise, 2012). The utilisation potential of a park is evaluated by using the quality criteria which is directly linked to accessibility of the park, suitability of different activities (diversity of facilities and equipment), amenity (depending on microclimatic conditions, space safety etc) and sociability of the park (the possibility of engaging in social activities) (Galečić, Tomićević-dubljević, Ocokoljić, Vujčić, & Skočajić, 2016).

Parks and gardens are tangible reflection of the quality of life in a community, they provide identity for citizens. Community involvement in neighborhood parks is associated with lower levels of crime and vandalism (project on human development in Chicago neighborhoods (phdcn), 2016; national recreation and park association (nrpa), 2016). Parks and green areas is used by different people children, young adults, elderly, people with dogs, joggers etc. Expectations for the use and quality of green areas may vary different amongst these different user groups. Thus, inadequate utilization of urban parks and gardens facilities by its intended users such as family affiliation (family reunions), socio-cultural alignments (unintended or planned gatherings with friends, neighbors, strangers, or work colleagues), cultural alignments (youth groups, ethnic groups, religious gathering, groups gatherings who share the same goal or beliefs (exercise groups, walking groups, football fans is a great concern). Several studies done on parks and gardens especially in Nigeria have been concentrating mostly on the recreation activities obtainable from the parks and garden, only few is keen about the utilization and performance of the parks and gardens with respect to quality of services rendered and spatial characteristics of the individual parks which can inform adequate planning and sustainability according to Marafa (2010).

When a space is accessible, it means it is designed to be available to as many people as possible and does not limit or exclude any individual (Agrawal, 2013). In determining a space’s level of accessibility, one must observe the design in its entirety and consider whether or not it meets the following criteria: accessible to all
individuals, physically connects with the surrounding landscape, and has clear and defined entrances. Spaces that are accessible to all individuals are designed to accommodate children, the elderly, pregnant women, mothers with strollers, and the blind (Evcil, 2012). Also spaces that do not cater to a variety of users run the risk of experiencing little to no usage due to limited accessibility. How users perceive their surroundings greatly affects how they act or interact within the built environment. An urban public space can encourage different levels of social interaction simply by how the space is designed, designs that cater to accommodate a multitude of activities provide an opportunity for different types of users to socialize with one another within a shared space thus, designs that are open for interpretation by the users also provide opportunities for social interaction to occur.
2. Methodology

The study area is Port Harcourt Metropolis, Rivers State, Nigeria. Port Harcourt Metropolis comprises Port Harcourt City Council and Obio/Akpor Local Government Area.

![Port Harcourt Metropolis and its Environs](image)

**Figure 1: Port Harcourt Metropolis and its Environs**

**Source:** Rivers State Ministry of Planning (2018)

The study adopted a cross sectional research design. This design was appropriate because the study uses different groups of people who differ in the variable of interest but who share other characteristics such as socio-economic status, educational background and ethnicity (Cherry, 2018).
The population of this study comprises of the visitors of urban parks and gardens in Port Harcourt metropolis and staff that work in the twenty five (25) selected urban parks and gardens facilities. The purposive sampling technique was used, this technique was employed to choose 25 parks and gardens based on convenience, accessibility, and spread. Primary and secondary data were used, the primary data comprised of two structured questionnaire, one for the visitors and another for the staff of parks and gardens, designed to elicit information from visitors and the staff on the aim and objectives of this research. Descriptive statistics were used to describe the responses from the visitors on the level of use and quality of service.

3. Result and discussion

3.1 Level of use

Respondents were asked to give a ballpark estimate of their frequency of visits to the park and gardens where they were being interviewed.

Table 1: Distribution of respondents that visit to gardens and parks

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>15</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Weekly</td>
<td>83</td>
<td>14.5</td>
<td>14.8</td>
</tr>
<tr>
<td>Monthly</td>
<td>67</td>
<td>11.7</td>
<td>12.0</td>
</tr>
<tr>
<td>Yearly</td>
<td>87</td>
<td>15.2</td>
<td>15.5</td>
</tr>
<tr>
<td>Once in a While</td>
<td>308</td>
<td>53.8</td>
<td>55.0</td>
</tr>
<tr>
<td>Total</td>
<td>560</td>
<td>97.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>999</td>
<td>12</td>
<td>2.1</td>
</tr>
<tr>
<td>Total</td>
<td>572</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s analysis

Across the respondents, the group that visits occasionally (“once in a while”) made up 55% of the respondents, thus most people have no regular pattern of visit to parks and gardens. Regular visits such as
weekly, and yearly occurred for about 30% of the respondents (i.e. 15% each) while once in a year were reported by around 12% of the respondents. Respondents visiting parks and gardens daily represented the minority (3%). This pattern gave an indication of the value people ascribed to parks and gardens in their life.

3.2 Perceived Quality of Service

To capture the perception of the quality of service respondents were also asked to rate the magnitude of their satisfaction with services rendered at their respective parks and gardens. The responses were summarized in the table 2. From the result, distribution of the magnitude of satisfaction is considerably high with 75% of respondent indicating high and very high satisfaction level for the parks and gardens they used. The remaining respondents indicated low to moderate satisfaction.

Table 2: Distribution of perceived level of quality of services

<table>
<thead>
<tr>
<th>Satisfaction Rating</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>19</td>
</tr>
<tr>
<td>Moderate</td>
<td>124</td>
</tr>
<tr>
<td>High</td>
<td>283</td>
</tr>
<tr>
<td>Very High</td>
<td>143</td>
</tr>
<tr>
<td>Total</td>
<td>569</td>
</tr>
</tbody>
</table>

Source: Researcher’s fieldwork and analysis

This result gave an indication that most people are satisfied with the level of services they received. This is because the respondents may be genuinely highly satisfied; they may be exaggerating because they do not want to change so they seek comfort in lying about the services; or they are used to the quality of services provided that is the best they have seen or experienced. From this it becomes relevant to examine if the satisfaction rating is associated to the frequency of their visits. Essentially, this would allow insight on how the frequency of visit relates to the rating of quality of services at the parks and gardens surveyed.
Table 3: The Chi-Square test of independence results is shown the distribution of perceived level of quality of services

<table>
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<td>569</td>
</tr>
</tbody>
</table>

Source: Researcher’s Analysis

This result gave an indication that most people are satisfied with the level of services they received. There are potentially two possible explanations for this high level of satisfaction: The respondents may be genuinely highly satisfied; they may be exaggerating because they do not want to change so they seek comfort in lying about the services; and they are used to the quality of services provided and that is the best they have seen or experienced.

However, it is not the remit of this current work to examine these, thus the adopted explanation is that they are genuinely highly satisfied.

From these, it becomes relevant to examine if the satisfaction rating is associated to the frequency of their visits. Essentially, this would allow insight on how the frequency of visit relates to the rating of quality of services at the parks and garden surveyed.
Table 4: Chi-Square test of independence between frequency of use and satisfaction rating

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>22.292</td>
<td>12</td>
<td>0.034</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>23.152</td>
<td>12</td>
<td>0.026</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>0.191</td>
<td>1</td>
<td>0.662</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>560</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s analysis

Evidently, the result from table shows that there is a statistically significant association between frequency of use and satisfaction rating. This gave an indication that those who visit more frequently will most probably rate the parks and gardens more favorably while occasional visitors are most likely to rate them less favorably.

Perception of Quality Rating by Users

The respondents were asked to rate the quality of the parks based on their perception of the general level of operation of the establishment. The performance was examined from two dimensions:

a. general view of adequacy of services delivered – this was rated using three classes: very adequate, inadequate, and not adequate;

b. general rating of the quality of the location - patrons surveyed were asked to rate the location of the parks (6 classes – excellent, very good, poor and very poor)

3.3 Rating of Adequacy of Services

Result of the general rating of adequacy of services show that slightly more than half of the patrons (51%) who responded to this question rated the services delivered as adequate. In addition to this, 34% and 15% rated the services as very adequate and not adequate respectively. To get a closer look at the responses, a breakdown for each of the parks and gardens.
Table 5: distribution of adequacy of services responses

<table>
<thead>
<tr>
<th>Park/Garden</th>
<th>Very adequate</th>
<th>Adequate</th>
<th>Not adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Row N %</td>
<td>Count</td>
</tr>
<tr>
<td>7th Heaven</td>
<td>11</td>
<td>57.9%</td>
<td>8</td>
</tr>
<tr>
<td>Arena Event center</td>
<td>6</td>
<td>31.6%</td>
<td>13</td>
</tr>
<tr>
<td>Atrium</td>
<td>2</td>
<td>10.5%</td>
<td>16</td>
</tr>
<tr>
<td>Camp David</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
</tr>
<tr>
<td>Diette Spiff</td>
<td>6</td>
<td>15.8%</td>
<td>24</td>
</tr>
<tr>
<td>Eka Event</td>
<td>2</td>
<td>10.0%</td>
<td>18</td>
</tr>
<tr>
<td>Garden city Amusement park</td>
<td>34</td>
<td>72.3%</td>
<td>11</td>
</tr>
<tr>
<td>Grace place</td>
<td>3</td>
<td>17.6%</td>
<td>14</td>
</tr>
<tr>
<td>Hub Event</td>
<td>13</td>
<td>68.4%</td>
<td>6</td>
</tr>
<tr>
<td>Isaac Boro</td>
<td>3</td>
<td>14.3%</td>
<td>17</td>
</tr>
<tr>
<td>Jubilee Park</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
</tr>
<tr>
<td>Moment</td>
<td>3</td>
<td>15.0%</td>
<td>17</td>
</tr>
<tr>
<td>NIG Navy play ground</td>
<td>2</td>
<td>9.5%</td>
<td>10</td>
</tr>
<tr>
<td>Nig Prison Play Ground</td>
<td>1</td>
<td>5.3%</td>
<td>7</td>
</tr>
<tr>
<td>Oasis</td>
<td>8</td>
<td>40.0%</td>
<td>12</td>
</tr>
<tr>
<td>Peoples club</td>
<td>4</td>
<td>21.1%</td>
<td>11</td>
</tr>
<tr>
<td>PH Club</td>
<td>25</td>
<td>83.3%</td>
<td>5</td>
</tr>
<tr>
<td>PH Golf club</td>
<td>5</td>
<td>31.3%</td>
<td>11</td>
</tr>
<tr>
<td>PHC Boat Club</td>
<td>6</td>
<td>31.6%</td>
<td>9</td>
</tr>
<tr>
<td>PHC Pleasure park</td>
<td>24</td>
<td>63.2%</td>
<td>14</td>
</tr>
<tr>
<td>PHC Zoo</td>
<td>3</td>
<td>15.8%</td>
<td>14</td>
</tr>
<tr>
<td>Polo</td>
<td>6</td>
<td>31.6%</td>
<td>13</td>
</tr>
<tr>
<td>RVS Musuem</td>
<td>8</td>
<td>44.4%</td>
<td>9</td>
</tr>
<tr>
<td>Spring Place</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
</tr>
<tr>
<td>TiiAma Galaxy</td>
<td>11</td>
<td>55.0%</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Researcher’s statistical analysis

While the general view as presented may hide individual peculiarities, the results presented showcased those peculiarities in the perception of adequacy of services. Six of the parks and gardens (24% of the sampled parks and garden) surveyed have more than 50% of the patrons sampled rating their performance rated very adequate – 7th Heaven (58%); Garden City Amusement Park (72%); Hub Event (68%); Port Harcourt Club (83%); Port Harcourt Pleasure Park (63%); and TiiAma Galaxy (55%). These could potentially be referred to as the top-rated parks and garden in the City based on the results obtained from this study. However, there are 4 establishments which majority of the patrons (more than 50%) rated them as not adequate in their performance. These are Camp David (70%); Jubilee Park (71%); Nigerian Prison playground (58%); and
Spring Place (67%). Consequently, these represent the bottom-rated establishment among the surveyed parks and gardens.

Majority of the parks and gardens (60%) were rated mostly as adequate, clearly these facilities/amenities were deemed just adequate in their performance – an indication clearly that there is room for improvement in their performance. For example, Nigerian Navy Playground have 48% (majority) of respondents rating it as adequate while Port Harcourt Boat Club had 47% rating it as such. Evidently, these establishments which are right in the middle (not fantastic but not distinctly poor in their performance) are the most common.

3.4 Discussion of Results

The result shows that frequency of use is associated to the level of use among the respondents effectively the more a patron visits a recreation centre the higher the probability they would rate the centre more favourably. This is in line with the model suggested by Silcox and Soutar (2009), who suggested that perceived value (influenced by perceived risk, technical services quality, functional services quality) which modifies emotional, functional, social and monetary values. The perceived value is then proposed to be a function of satisfaction which impact intention to revisit the recreation centre. Essentially, as the result from this study indicated, frequency of visit and perceived quality of service are dependent on one another. This result corroborate the findings of Howat and Assaker (2013). They found that perceived quality is strongly influenced by overall satisfaction and loyalty among the repeat customers of three public aquatic centres in Australia. Evidently from their study satisfaction is mediated by perceived quality and behavioral intentions. This could explain why those who rated the centres less favourably are those with lower level of patronage, clearly their overall satisfaction is modifying their intention for revisit.

3.5 Conclusions

Examination of the data on perceived quality of service and level of use shows that there is an association between the two. Consequently, the perceived value derived from the patronage modified other derived values and thus affect patronage of these recreational facilities. Therefore, as perceived value derived improves, there is likely to be a positive impact on intention to revisit the recreation centre. This is evident from the results showing that those who rated facilities less favorably also have lower patronage of those facilities.
3.6 Recommendations

There is need for re-evaluation of the place of parks and garden in the development of the city. While the government owned facilities were part of the plans for the city, the surrounding land use has changed considerably making them look like a sore thumb within the city. All the privately owned are not planned into the city, therefore their location usually contradicts the surrounding land use. Effective and proper planning and incorporation of recreation into such plan will address this issue.

Also, adequate funding and development of recreation is not only good for the economy, it is also a long-term investment in the people. This will grossly affect the development, maintenance and utilization of urban parks and gardens in the state.

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