

## **Pathways to Urban Parks Functionality Enhancement: Lessons from Gugu Dlamini Park**

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### **1 ABSTRACT**

Urban parks are a crucial component of the city fabric but their intended use is overlooked by informalities and activities that distort the user's positive experience. South Africa has been investing massively in urban parks to improve the fabric of cities. However, the approaches to enhancing the functionality of urban parks have not yet been studied and documented convincingly, particularly in most urban areas. Consequently, this paper highlights the pathways to enhance the effective use of urban parks, specifically focusing on Gugu Dlamini Park, eThekweni Municipality. The study adopted a case study research design and applied a qualitative approach to gather relevant data on the current use of urban parks. Specifically, data was collected using geo-spatial mapping, in-depth interviews, and observation schedules. The paper reveals that the elements such as safety and placement affect park users, mainly due to poor management and enforcement. The paper recommends the incorporation of urban parks within government and municipal strategic goals. There is also a need to integrate informal trading into formal spaces in urban parks. In conclusion, the paper recommends that to achieve effective utilization of urban parks they must be inclusive and vibrant. The enhancement of urban park functionality fits well into the broader phenomena of the current use of parks in urban areas.

Keywords: Urban Parks, Urban Green Spaces, Placement, Public Spaces, Informality

### **2 INTRODUCTION**

Historically, urban parks were intended to offer open spaces inside cities to diminish the harmful impacts of industrialization. Lately, many countries have acknowledged the importance of the multi-functional use of urban parks (2017 Kothencz, G.; Blaschke). Nevertheless, many of these urban open spaces suffer from underutilization due to several reasons that among others include a lack of social activities and sports, inadequate facilities, and poor maintenance and safety ( Akpınar, 2020; Babey et al., 2015). This study aims to evaluate the factors desirable to enhance the park's functionality and also analyse the subjects influencing the use of urban parks in South Africa.

Urban parks have always been an element of the city structure; though it is not been an occurrence since the nineteenth century (Abdelhamid, 2019). For example, up to the nineteenth century, Britain's towns were characterized by low-density growth (Gunn, (2013). According to Walker and Duffield (2007), citing Chadwick (1966); Perrin and Cochrane (1970), states urban areas were not developed at densities that were high enough to totally remove open space until the nineteenth century. Walker and Duffield (2007), add that the nineteenth century stood out due to rapid urbanization, and the exceptional speed at which cities were growing, this resulted in the first active promotion of urban open space. They further explain that urban open spaces must be viewed essentially as the consequence of the emerging industrial cities as well as of the social and geographical organization of fast-growing expanding populations.

According to the United Nations (2018), the total urban population of the world is set to intensively grow, it is highly expected that by 2050, three billion more people are projected to reside in cities, bringing the proportion of urban dwellers to two-thirds of the global population. In spite of this, the rapid growth of cities and urban areas and how urban parks are used have led to the clear decline of urban open spaces around the world, resulting in significant social and ecological problems (Faragallah, 2018). Urban park functionality enhancement has become a prime essence of restoring the intended use of green spaces in urban areas.

### **3 PUBLIC SPACE AND THE ROLE OF URBAN PARKS**

Alwah et al. (2020) argue that urban parks are crucial for the social growth of city dwellers, pointing out that social interactions are developed in these settings. Soltanian & Mohammadi (2015) agree to state that more than serving a purely functional purpose, urban public open spaces are essential for fostering social connections or ties among residents. They further state that public spaces in a city are impacted by the social

and economic developments of the era, which result in altered cityscapes. Thus, continuing in their explanations, they state that social problems in cities might result from a lack of an appropriate urban space. It points out that the rapidly changing social conditions have increasingly affected how people use and influence their surroundings. In addition, Abbasian (2016); Balogh & Takacs (2011) state that overall, the urban population has been dramatically growing, and this results in the physical makeup of metropolitan regions constantly changing, typically in negative ways. In another instance Memluk (2013) adds that infrastructure and equipment are more in demand as the population grows, which results in "increased mobility, communication technology, and globalization causing metropolitan areas to grow and change in size, resulting in a shift in lifestyle and use of public places." On the contrary, Abbasian (2016) and Mehmet NCEOLU (2009) place emphasis on the impact of technological advancements on causing worry, which worsens daily to the point that the effects have further isolated and privatized people's lives. As a result, the significance and importance of public spaces in social life decrease resulting in urban open spaces being used inappropriately as designed or intended.

Furthermore, according to Abdelhamid, & Elfakharany (2020), Berg et al (2022), research on the use and significance of urban environments have been carried out in Europe, America, Australia, China, and several East Asian nations. These studies have confirmed the various aspects of using and visiting open spaces. This study fills in a knowledge gap. For instance, a study on urban open spaces in Yemen, an East Asian country, reveals that the majority of the population uses open spaces for walking, playing with their children, relaxing, and amusement. Users also like locations that offer suitable and ample seating places, a variety of contemporary entertainment options, a high standard of hygiene and maintenance, and secure locations free from intruders (Alwah et al., 2020). Such information, they say, helps Yemeni urban planners and developers create new public spaces and help restore deteriorated open spaces (ibid). According to Fan et al. (2017) Faragallah 2018, Niemelä (2014), Wolch et al (2014), public open space is one of the most important components of sustainable urban design and development. They explain that in addition to providing ecosystem services to the populace. These ecological services include changing the climate, managing stormwater, and enhancing air quality as well as regulating leisure, sports, and recreation (Elsheshtawy, 2011).

Conversely, urban parks are essential for fostering individuality and cultural variety, which exemplifies democracy through open-access public places (Thompson, 2002). Instead of seclusion in situations with only one type of culture, intercultural interaction in public places helps to foster tolerance and understanding among people (Salama & Gharib 2012). Additionally, parks are good for people's health and fitness when they engage in exercise activities or simply walk outside to appreciate or enjoy nature. This is crucial given the rise of age-related disorders like heart disease and obesity brought on by new lifestyles (Salama & Azzali, 2015). However, in order to create lively and dynamic urban park environments that improve well-being and quality of life, it is important that the design, planning, and administration of these open spaces consider the needs and expectations of users by being cognizant of their experiences and preferences (Alwah et al., 2020).

#### 4 MATERIALS AND METHODS

The study adopted a phenomenological case study research design as it seeks to investigate pathways to urban park enhancement in Durban, South Africa. The case study assists in conducting a systematic, critical inquiry into a phenomenon of choice and generating understanding to contribute to cumulative public knowledge of the problem (Simons, 2009). A qualitative research approach was used which qualified the collection of qualitative data (Mohajan, 2018). The study was carried out through in-depth interviews with personnel from users of the park, officials from the eThekweni municipality Department of Parks, Recreation and Culture, and an academia from the Department of Town and Regional Planning, University of KwaZulu-Natal.

To reveal the condition of the park and complimentary amenities (street furniture), geo-spatial mapping was applied as a visualization tool for the spatial arrangement of the study setting. The research area was visited for direct observations and photographic assessment purposes. The convenience and purposive sampling methods were employed to recognize all the study respondents, and further adopted a descriptive-analytic strategy but relied more on developing case descriptions. The intention of making a case description was to

postulate the activities observed at Gugu Dlamini Park and put these observations into context (Yin, 2002). The techniques of pattern-matching, explanation-building, and time-series were developed for data analysis

## 5 RESULTS

This section presents the findings of the study. It highlights the pathways to Urban Parks functionality enhancement. UN-Habitat (2015) has been in the lead in enhancing the improvement and provision of urban open spaces. “Cities that have a strong impression of the public, demonstrate an obligation to an improved quality of life of their residents by providing suitable green area, street space and recreational facilities” (UN-Habitat 2015:4). The results from the empirical investigation are based on three thematic areas namely; planning for a variety of activities, enhancing physical attributes of the park and ensuring safety and maintenance.

### 5.1 Planning for a Variety of Activities

According to observations conducted over three weeks during morning hours, afternoon hours, and evening hours at Gugu Dlamini Park, it was discovered that the space is dominated by myriad activities including vagrancy, illegal trading, cultural dances as well as young adults consuming alcohol on the edges of the park. According to the eThekweni Municipality Parks and Recreational Bylaws (2015), alcohol is prohibited in the urban open space unless it is consumed in designated areas, which unfortunately are not present at Gugu Dlamini Park, and the bylaws further prohibit any form of trading without obtaining a permit from the municipality. Figure 1 shows the different activities that occur in the park and includes users of the space frequently taking pictures next to the HIV/AIDS sculpture.



Figure 1. Various activities. Source: Author; field observations (2019)

Patterns in urban park activity and use appear to be associated with characteristics of the surrounding areas as well as the social environmental and physical characteristics of the park (McCormack et al., 2014). The types of visitors and times of use vary. The park is situated next to the Workshop Mall, during the lunch hour, workers from the mall tend to use it often and in the late afternoon is dominated by school children. Table 1 summarizes the prominent activities according to their time of occurrence.

Activity types	Time			
	Morning 06:00-09:00	09:00-11:00	Afternoon 01:00-01:00	01:00-03:30
1. Seating and relaxing	*****			
2. Vagrancy	*****			
3. Informal trading	*****			
4. Football play	*****			
5. Performances	*****			

Table 1 Activities vs. time observed at Gugu Dlamini Park

### 5.2 Enhancing physical attributes of Parks

Gugu Dlamini Park is positioned in a strategic position, which makes it easily accessible by the surrounding land uses. The nature of the area is associated with human interaction because of the adjacent mall to the park. The trails of the park are well-designed and connect both to the streets and other services (see Figure 2). Timmermans and Cilliers (2016), support the view that the physical attributes of a successful urban park can be quantifiable and tangible with attributes such as accessibility, location, shape, size, and natural features. Caryn et al (2018), further confirm that hardscape, landscape and services designs affect physical activity and influence the degree of urban open space usability.

Regarding supporting amenities, the urban park is furnished, however, it was observed that some of the street furniture has deteriorated. The elementary function of street furniture in urban open spaces is to assist the lives of citizens and provide them with a comfortable space (Tereci and Atmaca, 2020). The work anticipated from the space design is that its street furniture prevents redundancy and complexity. Therefore, the user will receive the best service in an original, harmonious, and comfortable place. About 56 % of the respondents at Gugu Dlamini Park complained about the lack of shelter during rainy and hot days as enormous portions of the park are deprived of shelter. The park further lacked essential facilities such as bathrooms and water fountains. Caryn et al (2018), A National Study of Neighborhood Parks in America approved that number of park users may decrease if the park does not have comfortable public toilets and clean water, even if it has great amenities and is easily accessible.

Although other facilities are not found, the remnant amenities are still crucial for the attraction of people to the space. The park has trees along the perimeters and the trees proffer a sense of boulevard scenery in the space. Users of the park enjoy taking photographs of the natural landscape and flowers.



Figure 2: Aerial view and existing park trails

### 5.3 Ensuring safety and regular maintenance

Urban parks are central to the functioning of cities and strongly impact the quality of life of city dwellers (Camargo et al., 2017; Koramaz & Türkoğlu, 2018). However, if urban parks feel unsafe, users are less likely to visit them. 76% of the respondents perceive Gugu Dlamini Park as an unsafe space because of the high presence of homeless people who pester and ask for money. Table 1 further substantiates and gives a clear insight into the vagrant people who occupy the park during the day. Dogrusoy and Zengel (2017) mentioned that the perceived safety of parks is a vital aspect that may discourage many potential visitors from enjoying and using available urban open spaces.

Observations from the researcher exhibited that users of the park use the green grass as an alternative to the designated pathways and trails. As a result, the presence of bare land in the green zones of the park is causing environmental degradation. Damaged waste receptacles and signage within the park were observed as a hindrance to the user's experience of the urban open space.

## 6 DISCUSSIONS

Understanding urban park purpose use and evaluating visitor perspectives on physical attributes, accessibility, safety, and maintenance can assist to advance planning, management, and design across a range of city parks. The research study was unique in that it applied a qualitative methods approach with on-site observations to evaluate urban park users' activities, as well as in-depth interviews to differentiate various viewpoints on access, use, improvement, and enhancement preferences.

The results obtained from empirical investigation reveal that enhancing urban park functionality is not a generalized topic. Urban park functionality comprises optimal landscape features such as plants and trees and physical attributes such as linkages that proffer excellent connection with adjacent land uses (PPS, 2015b). It is also argued that urban park functionality is dependent on social interaction environments and it has to be emphasized and addressed from an architectural perspective (Liu T and Liu W, 2016).

From the study observations, there were imperative highlighted park uses and discoveries that relaxation, adult interactions, and solitude were some of the most common park activities. These results are consistent with other studies that demonstrate urban parks as crucial places for encouraging psychological health (Bratman et al., 2019; Frumkin et al., 2017; Schnell et al., 2019). It is also evident that the use patterns of the park are influenced by a variety of socio-spatial factors. These findings were constantly disturbed by the presence of vagrant people who brought a sense of insecurity as submitted by users of the park.

As indicated in Table 1, informal traders and different performances as a form of entertainment are common activities in the park. Such activities received positive feedback from interviewed users of the space even though they are highly prohibited by the eThekweni Municipality Parks and Recreational Bylaws (2015) if they occur without the municipal's approval. Wood (2003), green spaces offer not only active and passive recreation but also include numerous socio-economic activities. In African cities, informal trading rests as a daily reality because it is the source of livelihood in today's extreme poverty and unemployment and it remains a call for urban planners to incorporate such activities in urban parks but also not compromise their functionality.

## 7 TOWARDS FUNCTIONAL URBAN PARKS

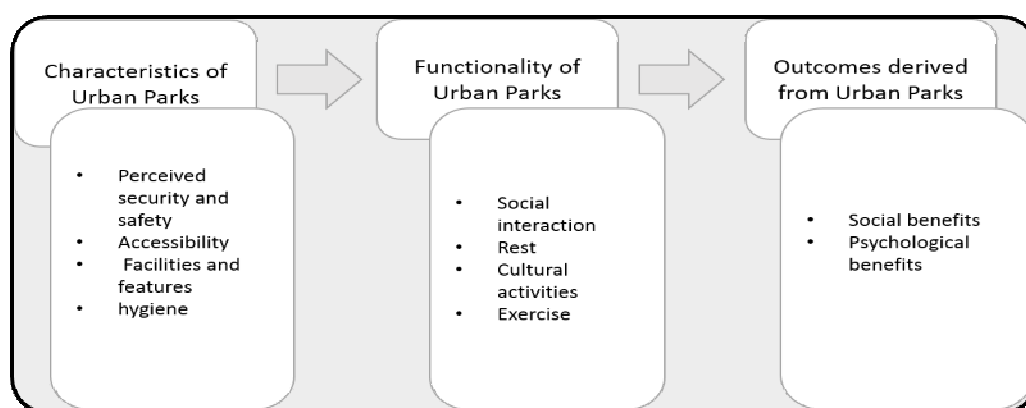


Figure 3: Relationship between urban park characteristics, functionality, and outcomes. Source: M. Mndzebele (2023)

As assumed by the empirical and literature reviewing outcomes, the characteristics of urban parks entail features and facilities, accessibility, hygiene, attractiveness, security, and perceived safety. The potential outcome is having functional urban parks that constantly encourage social integration and tranquillity as well as cultural activities as seen in Figure 1. The relationship between urban park characteristics, functionality, and outcome is demonstrated in Figure 3.

As part of facilities, to address informal trading in urban parks, it is of high importance for municipalities to provide unique and designated selling points within the spaces. It can be linked to the government policy of permitting informal traders to do business there so that the traders will not have to fear being evicted (Widjajanti et al., 2022). It is also advocated that a place makes sense when it is rich in urban park features such as sculptures, food concessions, benches, and water features. However as observed at Gugu Dlamini Park, these features are not enough to provide an exceptional user experience. Understanding the controls for change is an essential prerequisite for urban planners to be able to address joint concerns of planning as exemplified in urban park challenges.

The concern of vagrancy in urban parks is a sensitive social issue and cannot be dependent on urban planners only to proffer solutions. Institutions such as homeless shelters, rehab facilities, the private sector, and NGOs that deal with social development complications could be brought in as an intermediary to assist vagrants lodging in urban parks to be integrated well within the communities. Our analysis further reveals that cultural and social interactions were not appreciated with low tree cover. Plenty of the respondents found the park inefficient in terms of providing adequate shelter, especially during harsh weather conditions. Shade is

an important feature in urban parks concerning the improvement of social benefits as it allows users to stay longer, protected from over-exposure to unfriendly weather. Improving the attribute of shade can be a positive measure to further better physical activity levels and enhance the comfort of people's use of these types of spaces (Liu et al., (2023).

The approach to curb most urban park challenges and enhance functionality is by fully incorporating parks within the government and municipality's strategic goals. For example, as municipalities plan for security and safety, they must prioritize providing security for adjacent land uses for urban parks. If surrounding land uses for city parks have good surveillance, urban parks are most likely to benefit. This approach is not limited to safety but also accessibility. Gugu Dlamini is easily accessible according to respondents as the park was designed on the notion that supports the principle of ease of movement which presents the park in well-connected streets and adjacent land uses. Spaces that are easily seen from the street by passers-by are most likely to be used than those that are visually obscured, explaining the high patronage of space (Corbett, 2004:82). Access to transport and urban open spaces in particular, is important for human well-being as acknowledged by the UN sustainable development goals (UN, 2015, see 11.2 and 11.7).

## 7 CONCLUSION

It is clear that urban parks are important for the city of Durban and its users, therefore, not only the eThekweni Municipality and city planners should be responsible for making sure they are usable. Urban parks are an element that brings a refreshed atmosphere to cities, making it essential that they are well-maintained, regulated, and monitored for users. If the responsibility of making them usable is neglected by city residents, we will most likely experience and have similar issues with urban parks.

The findings associated with informal trading, vagrancy, and cultural activities signify that urban parks in the context of Durban are beyond the traditional intended meanings. The discoveries of this paper further confirmed that urban parks are shared by strangers who are generally not associates but peacefully coexist. However, these noble models are threatened by several issues, such as ablution facilities, lack of maintenance, and problems related to security and safety. These are imperative indicators that influence the current use, making it essential to critically find a holistic approach that will assist to encourage safe, friendly, healthy, and welcoming urban parks in Durban and South Africa.

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