

Does the Urban Park Provision Fit the Social Needs of the Community? Evidence for Semarang City, Indonesia

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ABSTRACT

Urban Park is a green open space in the form of social facilities that play an essential role in improving the quality of life of urban communities. This study aims to determine the categories of urban park services that can fit the community needs in Semarang City, Indonesia, covering locations of observation: Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Sri Gunting Park. Data were obtained by using a semi-open questionnaire from 100 park users. The analysis process used a scoring technique and hypothetical score category. The results showed that urban park services were in the “medium” category. It can be seen from the assessment of 17 ideal urban park variables, dominated by the “medium” category ($335 \leq X < 397$). They are completeness of the facilities, quality of facilities, types and the number of trees, suitability of the distance between spaces, park cleanliness conditions, clean air quality, wind, and sun direction orientation, parks’ use for social interaction, and users’ interest to promote the parks. These results indicated that urban park services were not yet maximum in fitting the community needs. This study is expected to be used for evaluation and input for future urban park planning.

Keywords: Urban community, urban park, urban planning, social interactions

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INTRODUCTION

Currently, urban parks as public social facilities encourage social cohesion and increase the quality of urban life, urban residents, and urban landscapes since they provide natural or artificial areas and supply freshness to the community (Bahriny & Bell, 2020; Chen et al., 2020; Lee & Hong,

2013; Olapiriyakul & Nguyen, 2019; Peters et al., 2010). The fulfillment of community influences sustainable cities embodiment needs to appropriate public facilities, equal distribution, and involvement of community participation, and the urban park is not an exception (Bakar et al., 2016; Tahmasbi et al., 2019; Tsou et al., 2005).

In many cities, there are still inconsistencies in the implementation of the plans; for instance, parks use a pattern that does not fit the community needs, and there is a dissonance between spatial indicators and the perceptions of park visitors, whereas parks are spaces for the common good and aim to bring equality to urban parks (Bogle et al., 2016; Boulton et al., 2018; Kothencz & Blaschke, 2017; Marquet et al., 2019).

Indonesia is one of the Asian countries with a friendly, sociable culture and community. Urban parks can also function as public facilities for social interaction (Harjanti, 2020). Semarang is one of the cities in Central Java, which serves as the capital of Central Java Province. Currently, Semarang is working to increase the availability of urban parks' quantity and quality. They do not yet have a proper and comfortable urban park. Besides, the physical quality of urban parks in Semarang is not optimal (Diseptyanto et al., 2014; Hariyadi et al., 2015). These facts led the researcher to select Semarang as the research location.

Research related to fulfilling the community needs of urban parks was conducted by Wu and Song (2017),

emphasizing the differences in urban park needs between the general community and community with special requirements concerning the level of inclusive needs, i.e., safety, accessibility, and routine maintenance. In similar research, Qin et al. (2013) focus on users' satisfaction with green space from a vegetation environment's perspective. Discussions related to the components of the urban park landscape by Deng et al. (2020) discuss the relationship between spatial characteristics and health factors. Furthermore, research on park services for users done by Kurniawan et al. (2019) assesses park quality based on park performance, service scale, and visit frequency. A similar study related to increasing urban park uses by Abdelhamid and Elfakharany (2020) focuses more on assessing factors required to improve the advantage of parks for the community. Based on this description, it can be stated that there are not many discussions regarding the assessment of park services on user needs and the exploration of users' preferences as an effort to increase the benefits of urban parks.

This study needs to be carried out to determine the category of urban park services in Semarang to fit the community's needs and determine the community's desires for urban park availability, referring to the lack of previous studies. Therefore, the assessment of the urban park is based on its users. Thus, it can describe the condition of the urban park based on the community's needs.

MATERIALS AND METHODS

Case Study

Urban parks in Semarang, as the samples of this research, focused on downtown parks that the government manages, are well known among the community and have different characters. This choice leads to research discussion based on users' perceptions. Thus, the selected samples emphasized urban parks that the community can use, specifically active urban parks. Downtown parks were chosen as they are located in the city center, which more people will visit. Besides having relatively easy access, they are also well-known by the community.

Urban parks selected in this study were Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Srigunting Park. According to Semarang Regional Regulation Number 14 of 2011 and Semarang City Spatial Planning, 2010–2030, these parks are active urban parks in Semarang city center. Based on direct observation in 2020, these parks have different characteristics. Simpang Lima Park is a field form park located in the city center of Semarang, Indonesia. Kaya Park is a modern park intended for relaxation and entertainment, Pandanaran Park carries the icon of Semarang City and is decorated with a statue of Warak Ngendog, Banjir Kanal Barat Park is a riverside park, and Srigunting Park is a historical park in historical areas, namely, the old city of Semarang. The location of this study observation is described in Figure 1.

Sample and Data Collections

Sample determination was carried out by purposive sampling technique, calculated using the Slovin formula (Tejada & Punzalan, 2012). The total population of Semarang City, 1,815,729 people, became the total population (N) (Dinas Kependudukan dan Catatan Sipil, 2018). Based on the service level of urban parks observed at the city level, it was assumed that all Semarang communities are allowed to visit these urban parks. Then, the margin of error used was 10% or 0.1, so the number of research samples obtained was 100 respondents. Sampling was conducted on Semarang citizens who have visited the selected urban parks (Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Srigunting Park) in the last one-year period (from August 2019 to August 2020), and on productive age (15–64 years). It is assumed that people in that age range tend to be interested in visiting urban parks. The distribution of the sampling was done evenly in the five urban parks. So, there are 20 respondents in each park.

Data collection was carried out by field observations and questionnaires distributed to park users within one month (August 2020), on weekends (Saturday and Sunday), at 6.00–8.00 AM and 4.00–6.00 PM. Many park users are assumed to visit the urban park on that day and time. The questionnaire's framing was determined by examining various theoretical references related to the ideal urban park, which were reduced to 17 variables. These variables were taken from studies conducted by Arifin

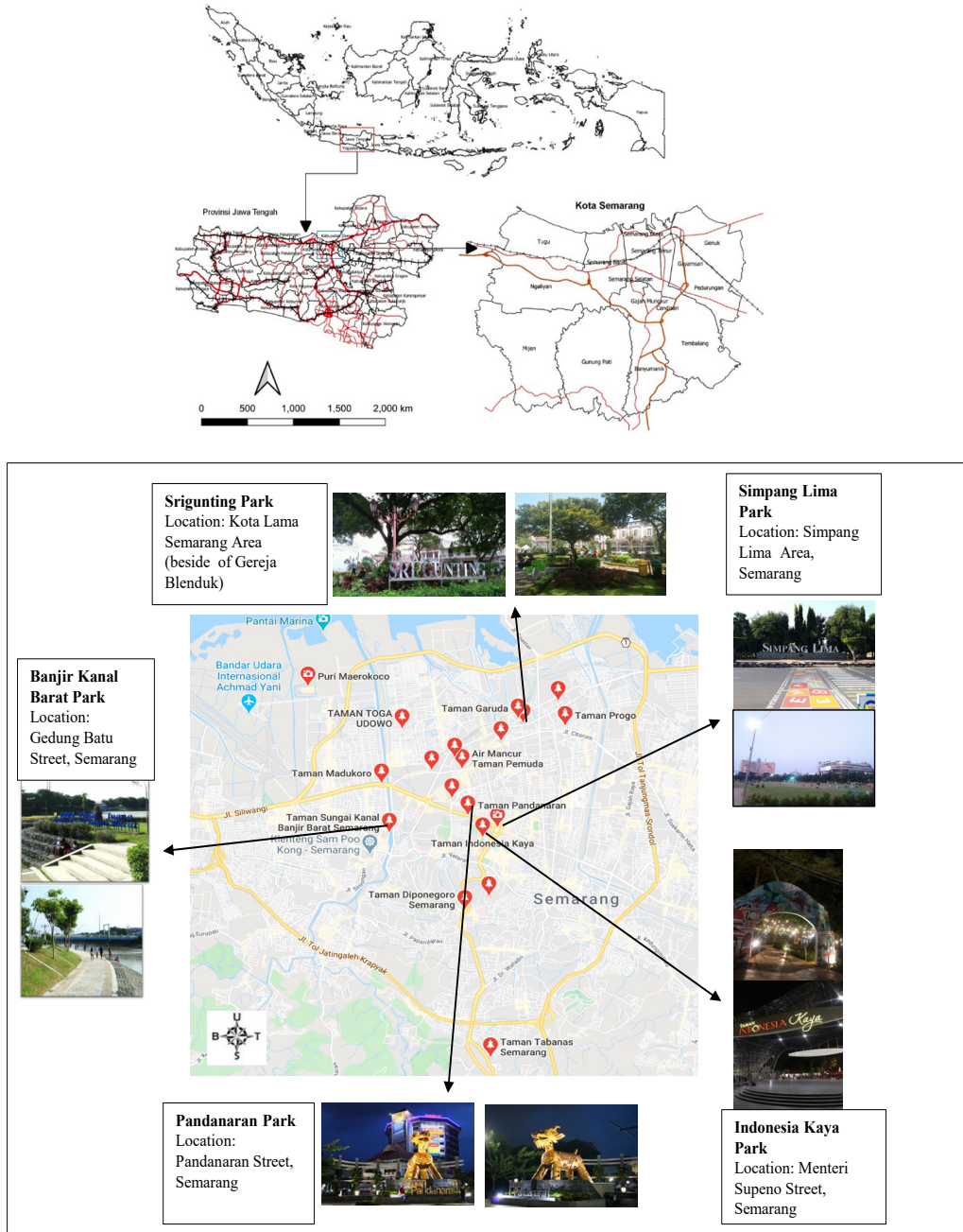


Figure 1. Locations of Urban Park study observation in Semarang
 Source: Based on direct observation in 2019 by author

(2006), Ayala-Azcárraga et al. (2019), Carr et al. (1992), Ellicott (2016), Lynch (1981); Maslow (1954); Kementerian Pekerjaan Umum dan Perumahan Rakyat (2008); Seymour (1980). They are completeness of facilities, quality of facilities, types, and the number of trees, suitability of distances between spaces in the park, park safety (crime and accidents), pollution levels, noise levels, and wind and sun orientation.

Then, park cleanliness, users' freedom to do activities in the park, utilization of urban parks as recreational facilities by users, use of urban parks as a place to gather and to hold social interaction, whether urban parks can inspire others to visit and get users to promote them to others, the role of the users in park management and the existence of the parks according to users. See Table 1 for more detail.

Table 1
Variables of an ideal urban park in previous studies

Variable	Carr et al. (1992)	Seymour (1980)	Lynch (1981)	Maslow (1954)	Arifin (2006)	The Green Flag Award (2017)	"Dinas Pekerjaan Umum" (2008)	Ayala-Azcárraga, et al. (2019)
Completeness of Facilities	v		v	v	v	v	v	
Quality of Facilities	v			v				v
Types and Number of Trees	v	v			v		v	v
The Suitability of the Distance Between Spaces			v					v
Park Cleanliness (Condition)	v		v			v		v
Park Cleanliness (Air)	v		v			v		v
Park Safety (Accident Aspects)	v		v	v				v
Park Safety (Crime Aspects)	v		v	v				v

Table 1 (Continue)

Variable	Carr et al. (1992)	Seymour (1980)	Lynch (1981)	Maslow (1954)	Arifin (2006)	The Green Flag Award (2017)	“Dinas Pekerjaan Umum” (2008)	Ayala-Azcárraga, et al. (2019)
Pollution Level	v	v		v		v		
Noise Level	v			v				
Wind Direction Orientation	v				v			
Sun Direction Orientation	v				v			
Freedom of Activity in the Park	v		v			v	v	v
Recreation Facilities and Gathering Places	v						v	
Promoting the Park by Users	v		v			v		
Users Roles in Park Management						v		
Park Existence		v						

Note. Based on the author’s analysis in 2020

Data Analysis

The assessment variable was derived from the questionnaire questions. Previously, seventeen questions were validated for reliability and validity based on values close to 1. Assessment of urban park services will be obtained based on the rating of park users, as well as the conditions of the urban park that the community needs since urban green open space design is one of the main criteria to create a good park that eventually

can meet the community’s preference (Hofmann et al., 2012).

To validate the results of the variable, we conducted a semi-open questionnaire given to users consisting of questions related to assessing park services and user preferences regarding the existence of urban parks. A 5-point Likert scale was used for the questionnaire: 1 (very bad), 2 (bad), 3 (medium), 4 (good), and 5 (very good). The questionnaire results were analyzed using a scoring technique and categorized using

the hypothetical score category by Azwar (2013) formula. The scoring category was determined by finding the mean (M) and standard deviation (SD).

Based on the analysis, the mean value was 366, and the standard deviation was 31. A “low” category is obtained if the total score is less than 335 ($X < 335$), the

“medium” category is applied when the total score is between 335 and 397 ($335 \leq X < 397$), and the “high” category is applied if the total score is more significant than 397 ($X \geq 397$). See Table 2 for more detail. By reviewing the questionnaire, the urban park users’ preferences were obtained.

Table 2
Urban park services category

No	Category	Formula	Score Scale
1	High	$M + 1SD \leq X$	$X < 335$
2	Medium	$M - 1SD \leq X < M + 1SD$	$335 \leq X < 397$
3	Low	$X < M - 1SD$	$X \geq 397$

Note. The source is from Azwar (2013) and the author’s analysis in 2021

Assessment of the availability of urban parks in meeting user needs can be seen from the categorization of scores from each variable. The results will show a comparison between the low, medium, and high categories so that it will be known from 17 variables which category dominates the most.

RESULTS

Completeness of Facilities

Complete facilities in the park affect users’ comfort; with complete facilities, users will be increasingly interested in using the parks to meet their daily needs. The questionnaire results showed that the urban park services in Semarang, in terms of completeness of the facilities, were in the “medium” category with a total score of 376. It is

indicated that existing facilities in the park have not fully met community needs, as the availability of existing facilities tends not to be based on the needs and desires of the community as users. It can be seen from the five observed parks, none of which completely meets the completeness of urban park facilities (Wibowo & Ritonga, 2018), including the availability of park benches, trash bins, lighting, pedestrian ways, parking areas, plazas, toilets, gazebos, information boards, electrical installations, and drainage networks. Pandanaran Park does not have a drainage network or car parking area. Simpang Lima Park does not have a gazebo, information board, and parking area. Srigunting Park does not have a parking area, gazebo, or plaza. Indonesia Kaya Park has no gazebo or parking area,

and Banjir Kanal Barat Park does not have toilets or a car parking area. An overview of the urban park in Semarang is shown in Figure 2.



Figure 2. Completeness of facilities in urban parks, Semarang
Source: Based on direct observation in 2020 by author

User preferences arose regarding the completeness of facilities in urban parks, such as the desire for additional security facilities (including road-crossing facilities, CCTV, lighting, pedestrian paths, and security guards), park attractions (including music, children's playgrounds, bicycle rents, jogging paths, and decorative lights), improved hygiene (including the addition of trash bins and presence of cleaners),

and additional public facilities (including parking area, hand washing area, drinking area, food stall, trade kiosk, additional toilet, non-smoking area, clear directions, extra seats, prayer room, WIFI access, lounge area, and electricity area).

The diversity of facilities desired by park users can be used as input for the efforts to improve urban park services; however, to achieve this comprehensive spatial

arrangement of public service facilities in urban parks also must be dynamically optimized according to the users' needs and local conditions (Yin et al., 2020). Therefore, urban parks can optimally meet the needs of the community.

Quality of Facilities

The results found that urban park services in quality facilities terms were in the "medium" category with 371 total scores. Several park facilities are currently unusable because of

their poor conditions, preventing park users from fully enjoying the benefits, such as the unsanitary toilets in Pandanaran Park and Srigunting Park. The parking situation is also inadequate and disorganized, with cars parked on the street instead of in proper parking areas. Trash bins in Simpang Lima Park are damaged and not regularly cleaned, as evidenced by the full volume of trash in the morning. In addition, the garden lights in Banjir Kanal Barat Park are currently not functional. An overview of the urban park facilities in Semarang is shown in Figure 3.



Full Trash Bin



Park Light Not Working



On Street Parking



Small Toilet

Figure 3. Condition of facilities in urban parks, Semarang
Source: Based on direct observation in 2020 by author

Users' preferences for the quality of urban park facilities desire good park maintenance (including good waste management, routine garden cleaning, repainting old-looking facilities, and checking the function of facilities regularly), artistic toilets, and promenades decorated with flowers. Increasing the community's desire to visit the urban park can be realized by fulfilling these various user preferences since complete facilities in the park are not enough without being accompanied by good quality facilities. Moreover, the quality of facilities in urban green spaces impacts users' use (Lindberg & Schipperijn, 2015).

Types and Number of Trees

The type of tree planted in the park is intended to provide shade and produce oxygen that will make the users feel fresh and cozy. Results showed that the urban park services for this service were in the „medium“ category with a 383 total score. It is caused by the fact that there were no shade trees in some parks that could provide coolness to users in the park. The types of existing trees also tended to be monotonous, as shown in Figure 4, which caused the park users to feel uncomfortable and reluctant to visit and return to the parks.



Figure 4. The presence of trees in urban parks, Semarang
Source: Based on direct observation in 2020 by author

User preferences for the number and types of trees in urban parks included shady trees, additional pollution-absorbing trees, ornamental plants, grasses, and the addition of types and amounts of vegetation. This preference can be used as input to make urban park users feel more comfortable because plant types have a positive and

significant effect on the freshness of humans and certainly affect park users' satisfaction (Deng et al., 2020; Qin et al., 2013).

The Suitability of the Distance between Spaces

Distance between spaces at the park impacts users' comfort because space density

is significantly related to microclimatic conditions and users' usage behavior (Xue et al., 2017). Consequently, the appropriate distance between spaces at the park will affect users' comfort. It was shown that the suitability of distance between spaces at urban parks was in the "medium" category with a total score of 388. It caused the distance between spaces in the parks to be subjective depending on each user, so the

distance between spaces will differ for each user. However, according to the standard, the individual space requirement is as wide as the span of the two hands. Therefore, user preferences want distance widening, but some want the distance between spaces in the park to be closed and the need for dividers between spaces—an overview of the urban park distance space in Semarang, as shown in Figure 5.



Figure 5. Distance inter-spaces in urban parks, Semarang
Source: Based on direct observation in 2020 by author

Park Safety (Crime and Accident Aspects)

Park security is essential for users' comfort as users mostly require a feeling of freedom from anxiety and worry, both from crime and accident aspects at the park. Crime in parks is influenced by the social cohesion of communities and park features (Taylor et

al., 2019), while security in parks is a high priority in fitting the needs of an inclusive park (Chang et al., 2012). In this indicator, park security can be divided into security from the criminal and accident aspects. Results showed that the safety indicators on the crime aspect were in the "low" category with a total score of 325 and the accident

aspect in the “low” category with a 330 total score. It means that users’ safety in urban parks was not well guaranteed because both park security variables are in the “low” category because not all urban parks are equipped with guard posts, security patrols, and adequate lighting at night (Figure 6), which worried users when visiting the

park. Meanwhile, if an accident occurs in the park, it may be caused by inadequate safety facilities and security standards. Among them are the steep height of the garden sidewalk curb, the distance of the park sidewalk from the highway that is too close, and the lack of traffic signs in the parking area.

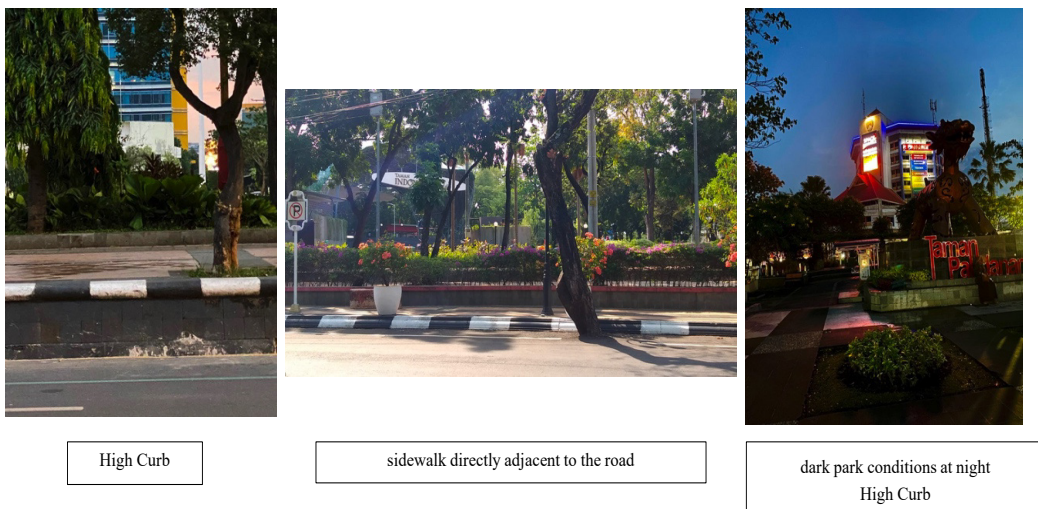


Figure 6. Park safety conditions in urban park, Semarang
Source: Based on direct observation in 2020 by author

Users’ preferences of security factors in the criminal aspect were the existence of lighting, alarms, CCTV, guard posts, security guards, row seats, security service signage, patrol procurement, legal parking, and policies related to the prohibition of visiting parks at night. At the same time, the accident aspect was almost not highly different from the crime factor, i.e., the existence of clear traffic signs, parking, a crossing area, a guardrail between the road and the park, the presence of CCTV, the addition of posts and security guards,

traffic regulation, lighting, adding bicycle and pedestrian paths, use of soft sidewalks for play areas, safe access to parks and enforcement of sanctions.

Pollution Level

Air quality in the park affects the user’s comfort as they need fresh air to carry out activities while being in the park. Results showed that users’ comfort related to pollution in Semarang urban parks was in the “low” category, scoring 324. It means that the pollution level in the parking area

still tended to be high, making the users uncomfortable because urban parks are in the activity center and on the side of a road with high accessibility (Figure 7). Thus, this causes the air quality in the park to decline

and is contaminated by vehicle fumes. Various types of vegetation that can absorb pollution and produce oxygen can be added to reduce pollution in the parks.

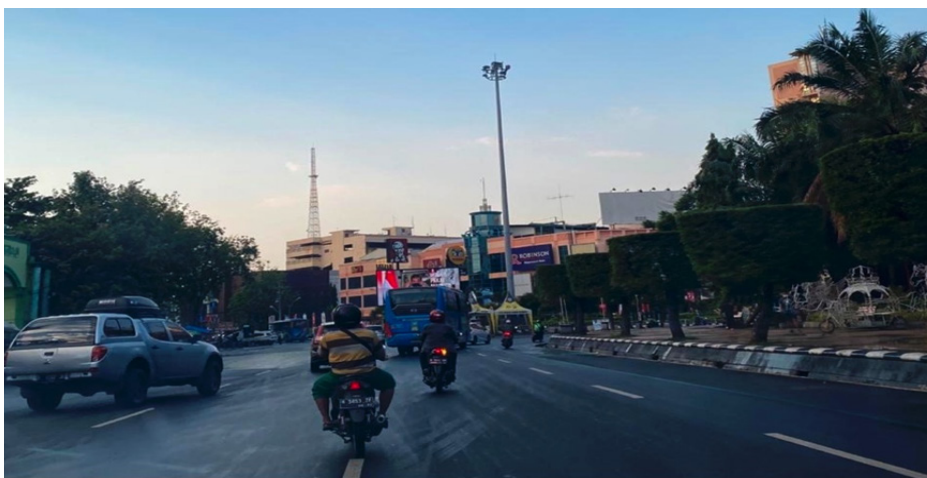


Figure 7. Pollution conditions around the urban park, Semarang
Source: Based on direct observation in 2020 by author

Users' preference fits that additional vegetation is required (tree species, flower plants, pollution-reducing vegetation, and general vegetation types). Furthermore, users' preference fits the existence of vehicle restrictions, and park cleanliness is always maintained, with the addition of air quality indicator tools and smoking prohibition regulations. Moreover, adding pollution reduction attributes (including fountains, water blowers, designated smoking areas, bicycle/pedestrian paths, fishponds, and activity separation nets).

Noise Level

Noise level is an aspect that affects comfort level because users need a convenient atmosphere for social interaction. The results

conclude that users' comfort regarding noise was included in the "low" category with a 309 total score. This score was the lowest score of other park indicators. This fact means that most users feel noisy when doing activities in the park. Perhaps it was due to the parks' location in some areas with high activity and on protocol roads so that many vehicles pass and cause noise, especially during rush hour (Figure 8). User preferences regarding noise in parks show that users want the addition of vegetation (species: trees, shrubs, and vegetation in general) because urban green spaces are an important factor in reducing the impact of noise in cities (Dzhambov & Dimitrova, 2015). Activity restrictions and adding noise-canceling attributes (such

as restricting vehicles on certain days and hours as well as adding a prohibition on making noise) and adding noise-canceling attributes (such as water, bicycle lanes, and music/songs) are also the users' desire to feel comfortable with noise.

Wind and Sun Direction Orientation

These aspects help provide comfort to users regarding wind and sun directions. The aim is to make users feel comfortable in the park in the morning, afternoon, evening, or night. The questionnaire showed that the users' comfort in the aspect of sun and wind direction orientation was in the "medium" category. The total score for the sun direction orientation was 368, and the wind direction orientation was 393. It caused building orientation in several parks that are not yet adjusted to the design standards, especially in the sun and wind direction orientation, causing the users to feel uncomfortable in the park at certain times, such as in the morning and afternoon (as shown in Figure 9). After all, they feel dazzled and do not get a cool breeze. Park users wanted regarding the orientation of the wind direction additional vegetation (trees that are placed according to the direction of the wind, flowers, and soft grass) and additional facilities (such as weathervanes, fountains, and seats, which are located according to the direction of the wind). Meanwhile, user preferences for sun direction orientation included adding vegetation (shady tree cover and vines), canopy/shade, and sunshine emitters.



Figure 8. Traffic conditions around the urban park, Semarang

Source: Based on direct observation in 2020 by author



Figure 9. Temperature conditions of urban parks, Semarang

Source: Based on direct observation in 2020 by author

Park Cleanliness

The park's cleanliness will significantly impact the comfort of those who use it.

The users will stay longer in the park with a clean park condition. On the other hand, users will not linger and do not want to visit again if the cleanliness of the park is not realized. There are two indicators of park cleanliness: cleanliness in terms of physical conditions and clean air quality. Based on the questionnaire, the cleanliness in the urban park of Semarang in terms of physical conditions and cleanliness of air quality was in the “medium” category. The

score for the physical condition aspect was 365, and the air quality cleanliness aspect was 357. It might be due to the lack of park management to maintain cleanliness and also caused by the lack of public awareness in maintaining cleanliness in the park, such as littering. Thus, air quality in the park becomes dirty—an overview of the urban park cleanliness in Semarang, as shown in Figure 10.



Figure 10. Cleanliness conditions of urban parks, Semarang
Source: Based on direct observation in 2020 by author

User preferences related to the park’s cleanliness in terms of conditions were emphasized on park management, the presence of standby cleaning officers, routine cleaning, sorting types of waste, giving strict sanctions for violators, routine painting, adding trash bins, providing trash bags, and sorting plants/plants that are not easily falling. Meanwhile, in terms of air cleanliness, users needed additions of shade and oxygen-producing trees, fountains, activity barrier nets, air quality indicator

machines, flower plants, smoking bans, traffic regulations and restrictions, good waste management, and expansion of green areas.

Freedom of Activity in the Park

Users’ freedom in activities in the park is immensely necessary because one of the functions of urban parks is to provide justice for the community to take advantage of (Carr et al., 1992). The results showed that the users’ freedom in using the urban park

was in the “high” category, with a total score of 401. It means the user felt free to do activities at the park (as shown in Figure 11). However, users still wanted additional supporting activity facilities (including a drink shop, WIFI, electricity/charging area, a place to relax, a play area, fine grass, a wide field, performing arts, sports facilities, handwashing place, toilet, and a special trading room). Moreover, they also wanted existing vehicle restrictions, cleaning of street vendors, restrictions on vehicles on certain days and hours, enhanced security

protocol, and no restrictions on visitors’ activity. Because the freedom to do activities in the park depends on the users’ objectives in utilizing the parks, this was also caused by the fact that each purpose of visiting the parks required certain facilities and conditions to take advantage of the urban park. The more complete the facilities available in the park will fit the needs of various user objectives, which eventually will have implications for the convenience of park users.



Figure 11. Activities in urban parks, Semarang
Source: Based on direct observation in 2020 by author

Utilization of Urban Parks as a Means for Social Interaction (Including Recreation Facilities and Gathering Places)

Based on the questionnaire, the use of urban parks for recreation and gathering was in the “medium” category, with a score of 396. Users have not fully used the park as a recreation and social interaction place. It might be because the park facilities are not able to fit the community’s needs for recreation and the local community’s culture,

which was not yet fully oriented towards recreational activities in the park. Urban green spaces oriented toward recreation can improve community welfare (Zhang et al., 2013). However, the park is used for social gatherings/interaction, although the frequency was not high enough. It can be seen from the preferences of users who want complete facilities (including culinary room, group seating, floor seating, canopy, sports facilities, hand washing area, drinking

and playing area. To increase comfort, users prefer to make the parking area shadier and cooler, with low crowd levels, free of street vendors and street singers, free of beggars, smooth grass, clean conditions, neatly arranged, and there is a room divider for activities. Then, to create beautiful scenery includes attractive design, lots of ornamental flowers, and nicely decorated), and the addition of a large area. The desire of these users can certainly be used as user input to increase the benefits of urban parks in meeting community needs, especially public green open spaces that can provide health benefits for the community, one of which is by facilitating social interaction activities (Sugiyama et al., 2018).

Role of Urban Parks in Inspiring Users to Visit and Promote them to others

One thing that influences users to get aspirations and promote urban parks to others is their sense of attachment to the park (sense of place). Furthermore, landscape features can also contribute to developing an attachment to a place (Ujang et al., 2015). Therefore, it is necessary to have park features that make users have a close relationship. The questionnaire results showed that users' interest in promoting urban parks to others was in the "medium" category, scoring 380. It showed that the community was not fully interested in promoting the parks to others because existing urban parks do not fully fit with the wishes and needs of the community. Accordingly, the park requires good management, additional facilities, and tourist attractions to make

users interested and promote it to others. The result aligns with the preferences of park users who wanted to create a comfortable park for activities (clean, cool, can be used for relaxation, well-maintained, and spacious). Moreover, they want easily accessible, complete facilities, and beautiful scenery (including attractive designs, highlighted garden landmarks, additional interesting photo spots, decorative lights, flower ornaments, and tourist attractions); additional storytellers about the park's developments and signs, including directions and park history info).

Role of Users in Park Management

The realization of a good, active urban park must involve the role of the users as the subject to maximize the function to fit the community's needs. Due to the inclusive planning, design, and management of green spaces and parks, urban planners and park managers must pay serious attention to the sensitive attributes of various social groups (Ahn et al., 2020). The results showed that the involvement of park users in park management was in the "medium" category, with a total score of 343. It could be because there is still minimal community involvement as users in park management. So far, the role of park users is only as visitors and keeping it clean (as shown in Figure 12). Moreover, the community is less involved in the park's management, planning, and design. Park management that involves the role of the community will attract more people to visit the park. Moreover, if interested, the community wants to provide

advice and input, participate in promotions, maintain facilities without damaging them, and take part in maintaining security.

Park Existence

The area of the park's size influences the existence or sustainability of the park in fitting the community's needs so that the users will not get bored visiting and taking advantage of the park. The results showed that the existence of urban parks in Semarang is in the "high" category, with a score of 418. It was the highest score of the other 17 indicators. It means that existing urban parks in Semarang can continue to exist because the urban park is in the city center area and has high accessibility, making it easy for people to visit. In addition, it is also observed that urban parks are well known not only for the people of Semarang but also for visitors from outside of Semarang City because these parks have a strong character, and some of the parks have become icons of Semarang City (Figure 13).

However, to create a sustainable urban park, users preference wants good park management, including increasing information/innovation, completeness of facilities, maintaining cleanliness, security, routine maintenance, integration between government and society, monitoring evaluation, structuring roads, traders, good maintenance and not being damaged, integration of tourist sites surrounding the parks, culinary space, and guaranteed security. They also want to add and maintain tourism icons and attractions (including adding storytellers of fairy tales, often



Figure 12. Role of users in keeping the park clean
Source: Based on direct observation in 2020 by author



Figure 13. Urban park that became the icon of Semarang

Source: Based on direct observation in 2020 by author

holding interesting routine events), increase promotion, and make additional signs about historical information easily accessible to anyone.

Based on the whole analysis, there were 11 indicators (65%) included in the “medium” category with a total score between 335–397, specifically, completeness of facilities, quality of facilities, types, the number of trees, suitability of space distances, park cleanliness related to conditions, air cleanliness of the park, wind and sun direction orientation, utilization of the park as a means of social interaction, users’ interest in promoting the park, and role of users in park management. In the “low” category, there are four indicators (24%) with a total score of less than 335, specifically, the safety factor of the accident aspect, the safety factor of the crime aspect, the users’ comfort with pollution, and noise. Moreover, two indicators (11%) were in the “high” category with a total score of more than or equal to 397—specifically, the users’

freedom to do activities in parks and the existence of urban parks. An overview of the urban park service categories in Semarang is shown in Figures 14 and 15.

DISCUSSION

The level of freedom of park users in carrying out activities was included in the “high” category. It is in line with Carr et al. (1992), which explains that one of the conditions for an excellent open space is an open space with an equal value where the community can freely use it for various activities. In addition, the presence of various activities in public areas should not interfere with the rights of every user (Rahayu et al., 2019). Some activities that users can do in open spaces, especially city parks, include recreation, friendship, and social interaction. Based on the analysis, the level of users utilizing the park as a means of interaction, including gathering and recreation activities, were included in the “medium” category, meaning that users have not fully utilized these functions. Parks are important city assets and allow users to do outdoor physical activities, social activities for residents, and recreation (Chen et al., 2020; Wei, 2017). In addition, park use is also influenced by the surrounding environment and the attributes of the park (Lyu & Zhang, 2019). Thus, if these two factors do not support one activity, using the park for some activities cannot be maximized.

Urban parks have proven beneficial for the community’s health and welfare (Deng et al., 2020). Thus, promotion and

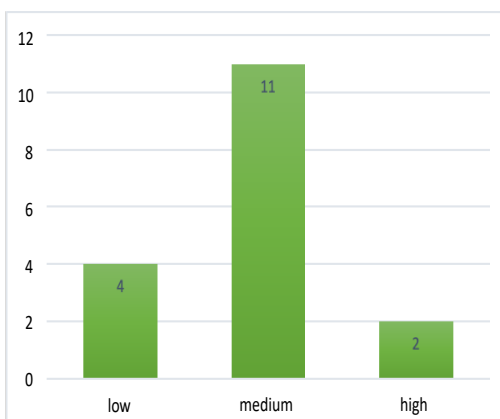


Figure 14. The distribution of service categories for urban parks in Semarang

Source: Author’s analysis in 2021

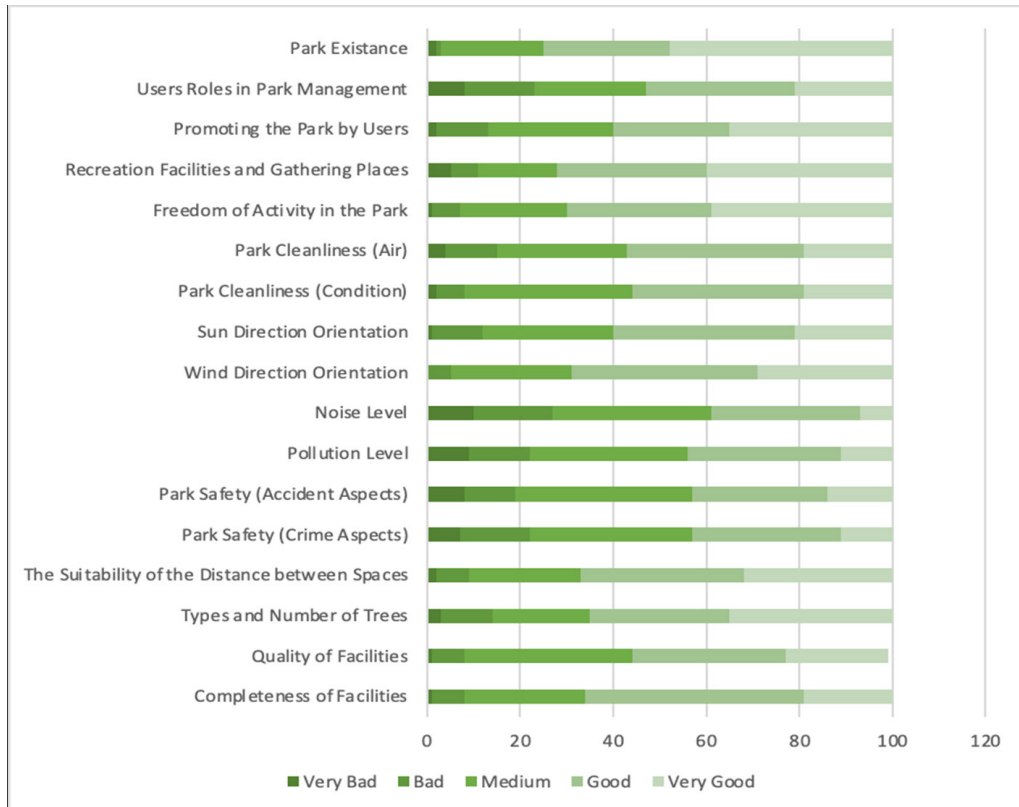


Figure 15. Category of urban park services on fulfilling the social needs in Semarang
 Source: Author’s analysis in 2021

socialization are required regarding the existence of urban parks to maximize the function of urban parks as important public facilities in fitting the needs of urban communities. The results showed that users’ interest in promoting the park to others to visit the park was in the “medium” category. The desire of the community to promote the park is certainly accompanied by a sense of satisfaction from the users in fulfilling their needs, and the attributes in the park must be able to meet various community groups. However, the analysis showed that the completeness of the park facilities was

not optimal, specifically in the “medium” category, which aligns with Ahn et al. (2020), stating that planning, designing, and managing inclusive green park spaces must pay attention to important attributes that can include various social groups. In addition, users’ interests are also based on attractive garden designs and are tailored to the community’s wishes. The analysis showed that the users’ desire for garden design can be made with the concept of being close to nature. It aligns with research conducted by Rink and Arndt (2016), which explained that the community wants parks and natural

areas in urban areas with traditional designs. In addition, it is necessary to make an urban park design according to user preferences (Lee et al., 2014) so that its users can maximize the benefits of the park.

The sustainability of public facilities, especially urban parks, is influenced by the quality of the park, while the quality of the park can be seen from its management aspect (Chan et al., 2018). The results show that the completeness and quality of the facilities in the park were not optimal because they were included in the “medium” category. This condition was possibly due to the lack of community involvement in urban park management. Good urban park management involves the community as users since the quality of life is closely related to demographic and behavioral variables, which have implications for management and policies in urban parks that relate to the park users’ background (Li, 2020). Consequently, the existence of urban parks can be based on the community’s needs, and thus, they can be utilized optimally by the community. However, the analysis showed that in terms of park management in Semarang City, it was in the “medium” category, which means that park management has not fully involved the role of the community. Accordingly, it will impact the low desire of users to visit the parks in the future since it does not fit with the users’ wishes. This result is in line with Nasution and Zahrah (2014), who found that several factors in public open spaces strongly correlate with people’s perceptions of public open spaces. Consequently, the

planning process and procurement of urban parks require community participation to make the parks maximally utilized by the community.

The advantages of this research are that it can show the category of urban park services, particularly downtown parks, in Semarang. This research also found various people’s preferences regarding the existence of urban parks. Accordingly, the research results can be used as an evaluation basis for urban parks’ existence, provide input for planning and designing urban parks in the future, and emphasize that the role of the community is very important in influencing the sustainability of the parks. Nevertheless, this study only evaluated the urban park services by users and the users’ perceptions. For further research, some studies about factors influencing the identification of urban parks discussion can be conducted, which refer to these results.

CONCLUSION

The findings indicate that the urban park services in Semarang are not maximal in fitting users’ social needs. The 17 ideal park indicators examined showed that the assessment was dominated by the “medium” category (11 indicators/65%). Various user preferences for the existence of parks show that the community has not fully fulfilled its needs through the benefits of urban parks. Consequently, to create an urban park that can fit the community’s needs, urban park planning is essential in the future to accommodate the needs of all people based on user preferences. It confirms the study

conducted by Asibey et al. (2019), stating that park management must involve the roles and aspirations of users. The urban park provided is intended to be utilized optimally by the community and fit their needs accordingly.

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