

# Post-Occupancy Evaluation of Hasanuddin University Urban Park

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## Abstract

Urban Park is one of the public open spaces that play a role in preserving the environment. Hasanuddin University Urban Park is known as the lungs of Makassar City. The key of a public open space is influenced by a few ideal criterias based on the ideal criteria for public open space according to Kathleen Madden and the Project for Public Space used in this study, such as sociability (social interaction that occurs); uses and activities; access and linkages, and comfort and image (a comfortable and interesting place to visit). This study aims to identify the condition of the Hasanuddin University Urban Park based on the ideal criterias for public open space according to Kathleen Madden and Project for Public Space and to describe the influence of visitor behavior refer to the condition of Hasanuddin University Urban Park. This study uses a descriptive analysis methods and place centered mapping analysis methods, the data collection techniques is using data triangulation (observations, interviews, and secondary data). The result and discussion shows that the condition of the Hasanuddin University Urban Park refer to the ideal criteria for public open space according to Kathleen Madden and Project for Public Space, is some aspects of intangibles and aspects of measurements have not met the criteria. Visitor behavior that occurs in urban parks is influenced by the condition of existing park facilities and attributes such as visitor parking behavior, visitor environmental hygiene behavior and visitor alert behavior.

*Keywords: Post-occupancy evaluation; ideal criteria for public open space; urban parks; visitor behavior*

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## 1. Introduction

In urban areas, the environment does not only consist of buildings but also consists of spaces without buildings or open spaces. Open space exists to be an ecological environment and open space can harmonize between built and unbuilt areas. The definition of space is a container that includes land space, sea space, and air space, including space within the earth as a unified territory, where humans and other creatures live, carry out activities and maintain their survival [1]. Open spaces are spaces within a city or a wider area, either in the form of an area/region or the form of an elongated area/lane wherein its use is more open and basically without buildings [2]. According to Hakim (2014), open space is a space that can be accessed by the public, either directly for a limited period or indirectly for an indefinite period. The open space itself can be in the form of roads, sidewalks, and green open spaces such as city parks, forests, and so on [3]. So, a green open space is an open space that functions as a place to accommodate joint activities in the open air that allows for social interaction between communities. The existence of green open space is one of the important

elements in forming a comfortable, beautiful, and healthy city environment.

Hasanuddin University is one of the major state universities in Eastern Indonesia, located in Makassar City, South Sulawesi. Hasanuddin University, which was then abbreviated as Unhas, was established on September 10, 1956, in Baraya, then in the 1980s, Unhas was moved to Tamalanrea until now. Unhas campus which occupies an area of 220 hectares in Tamalanrea has various facilities. In addition to functioning as an educational space, it is also an area of green open space which became known as the Unhas Urban Park. Previously, Unhas Urban Park was a deer breeding area that was moved to the back opposite the postgraduate building. Then in 2017, Unhas Urban Park in the welcome area comes with a design that is unique and attracts the attention of the public to become a destination for relaxing and doing outdoor activities. Unhas Urban Park is public and can be accessed by all levels of society.

In an excerpt from a written statement of the Public Communication Bureau of the Ministry of PUPR on Sunday, November 5, 2017, PUPR Minister Hadimuljono said the green open space of the Unhas campus which has an area of about 2.4 hectares is one of the urban forest areas and is known as the lungs of Makassar City [4]. In Carmona, et al, 2003, a good public open space is

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characterized by the public interest in using it and also indicated by the ease of visiting it [5]. So green open space can also be used as a public open space that can improve the quality of life of the community in line with human needs in carrying out joint activities (Siahaan, 2010) [6]. Therefore, as a public green open space, Unhas Urban Park is expected to be a place to carry out various activities.

Preliminary observations indicate that the use of space and activities that occur in the space has not been utilized optimally. There are overlapping activities that occur simultaneously. Public open space is said to be successful if it has ideal criteria, including (1) sociability, which can create a friendly atmosphere in social interaction between individuals; (2) uses and activities, which can accommodate activities in the open air such as exercising, relaxing, sightseeing, leisurely walks, and so on; (3) access and linkages, namely having good access and traffic, adequate facilities such as pedestrian paths, garden paths, seats, parking availability; (4) comfort and image, which is comfortable, cool, clean, healthy and has good visuals (in Kathleen Madden and Project for Public Spaces) [7]. In addition to the four criteria above, the success of public open spaces can also be influenced by the behavior of visitors as users of the space.

Unhas Urban Park as a public green open space has an essential function for urban communities. So that the urban park can be enjoyed in the long term and used by the community, periodic evaluation is needed to identify problems that occur. This study aims to identify the condition of the Hasanuddin University Urban Park based on the ideal criteria for public open space according to Madden and Project for Public Space and explain the influence of visitor behavior on the condition of the Hasanuddin University Urban Park (Fig. 1).

## 2. Literature Review

### 2.1. Ideal criteria for public open space

A great neighborhood is a friendly neighborhood is a quote from a book entitled "The Great Neighborhood Book: A Do it Yourself Guide to Placemaking", (Walljasper, Jay, and Project for Public Spaces, 2007) [8]. In the book, it is explained that the environment is the basis of human civilization and is interdependent and how the environment can be shaped by humans themselves. The environment that exists in cities, suburbs, villages, or



Figure 1. The front view of Hasanuddin University urban park

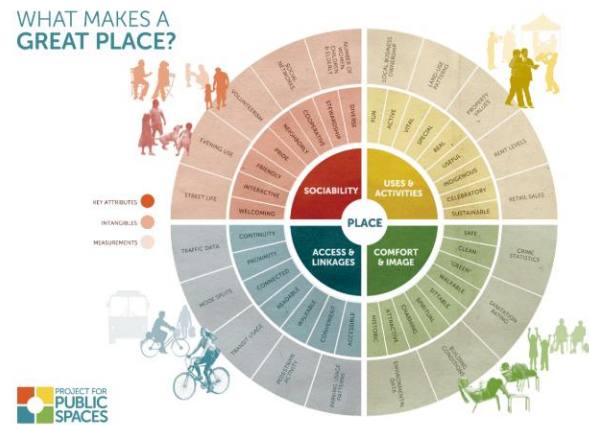


Figure 2. Diagram of the ideal criteria of public open space according to Madden and Project for Public Space (2000)

small towns is the level of social organization in which people interact naturally. Humans can create and determine what kind of environment they will live in.

Madden and Project for Public Spaces (2000) illustrate in a pie chart the ideal criteria for public open space (Fig. 2). Public space can be said to be ideal if it meets the following criteria [7]:

- Sociability, a good public space has social value where every individual can meet, greet each other, and interact with strangers with a comfortable and safe feeling because the environment is comfortable and safe as well. An ideal public space can create and grow social activities.
- Uses and Activities, good public space can foster visitor activity. The activities created can provide reasons why individuals need to come to the place and can visit again.
- Access and Linkages, a good public space is a public space that is easily accessible, traversed, and has good visibility from both a distance and a short distance. Accessibility of a place is seen from its connectivity with the environment, both visual and physical. Accessibility of public spaces also takes into account the distance to the parking lot and the distance of temporary stops for public transport.
- Comfort and Image, a good public space is able to provide comfort, security, and visuals for the space itself. Convenience and security are visitor perceptions of the cleanliness, safety, accessibility, and coolness of the place. Visual public space also gives an impression to visitors.

### 2.2. Visitor behavior

Community behavior is closely related to the space that accommodates it because human behavior can form patterns of activity that can also affect the shape of the space. In the aspect of environmental behavior, there are several important concepts in the study of environmental architecture and behavior, (Haryadi and B. Setiawan, 1996) as follows [9]:

- Behavior Setting, is an interaction between an activity and a specific place where a group of people carries out an activity, either the activity or behavior of the group of people, the place where the activity is carried

out, and the time the activity is carried out. Each group or group of people can form a different set of behavior, depending on the values, opportunities, and decisions formed by the group.

- Environment Learning, this concept relates to how to understand and give meaning to the environment or explain the relationship between humans and their environment. The process of understanding this environment includes a thorough and continuous understanding of an environment by individuals, where a person's environmental perception is subjective and dynamic.
- Personal Space and Crowding, Personal space is defined as an invisible boundary around a person that no one else is allowed to enter. Personal space can also be dynamic and adaptive, depending on one's environmental and psychological situation. A crowded is a situation of someone is unable to maintain his personal space. Congestion can be influenced by environmental factors, situational factors, and intrapersonal factors.

### 3. Research Method

The research location is in the Hasanuddin University campus area, precisely at the front of the entrance lane as a welcome area (Fig. 3).

This research is qualitative research that uses a rationalism paradigm with a descriptive analysis approach and behavioral analysis method, namely place-centered mapping. Data collection techniques use data triangulation, namely observations, interviews, and document analysis. Observations were made in November and December 2021 by sampling independently (randomly) and incidental techniques. Observations were made by taking into account the weather conditions, namely in the absence of rain (cloudy, overcast, and sunny).

The condition of visitors does not experience density every day. This study looks for the density of visiting times so that it can provide tangible results from Monday to Sunday. Observations were made randomly and between observations from Monday to Sunday, observations were taken with dense visitors, namely on weekdays, namely Monday and Thursday, and on holidays, namely Saturday and Sunday. Visitors are divided into individual visitors and group visitors. Of the



Figure 3. Hasanuddin University urban park map

total visitors per day (Monday, Thursday, Saturday, and Sunday) 3 individual visitors and 10 group visitors were taken with the number of individuals in different groups. The sample of individual visitors is determined by a maximum of 3 visitors according to the field situation because individual visitors per day in the morning, afternoon, and evening are usually no more than 3 people. For group visitors, a maximum sample of 10 group visitors is taken.

## 4. Results and Discussion

### 4.1. Physical condition

Unhas Urban Park can be reached through the main entrance to the Unhas campus, which is Jalan Pintu I. Unhas Urban Park consists of several zoning areas including an entrance, pedestrian hall, infinite bridge, courtyard, amphitheater, and wetland. As for the parking area across from the park, (Fig. 4).

#### • Softscape Elements

The vegetation contained in the park is tree vegetation that serves as a shade, namely rain trees (*Samanea saman*) and spanish cherry trees (*Mimusops elengi*) (Fig. 5).



Figure 4. The physical condition of Hasanuddin University urban park: 1 Parking area; 2. Entrance; 3. Pedestrian Hall; 4. Wetland; 5. Infinite bridge; 6. Courtyard and amphitheatre



Figure 5. Tree Vegetation as Shade: 1. Pedestrian Hall; 2. Wetland; 3. Courtyard; 4. Amphitheatre



• Hardscape Elements

The pedestrian path for the pedestrian hall area uses concrete pavement material with a road width of 10.25 meters. The pedestrian path in the courtyard and amphitheater area uses concrete pavement with a road width of 1.6 meters. The front of the amphitheater uses grass block material, while the courtyard is a green page overgrown with young spanish cherry trees. The infinite bridge uses concrete pavement material with a pier diameter of 50 meters and a road width of 2 meters. There is a wooden bridge that connects the courtyard area to the infinite bridge pier. In the wetland area, the pedestrian path has a floor height with the ground, using iron and conwood frame materials as floor coverings, the width of the road is 1.8 meters (Fig. 6).

• Other Attributes

Other attributes found in the park are one large billboard, one security post, and bicycle parking at the entrance area. In the pedestrian hall area, there is one small billboard, two information boards, garden lights, and four park benches spread over several points at a certain distance. In the wetland area, there are garden lights, box panels, and a trash can (Fig. 7).



Figure 6. Condition of the pedestrian path in the area: 1. Pedestrian hall; 2,5,6. Courtyard; 3. The bridge to the infinite bridge pier; 4. In front of the amphitheater; 7,8. Wetland



Figure 7. Attributes of the Park: 1. Big billboard; 2. Security post; 3. Bicycle parking; 4. Small billboards; 5. Information boards; 6. Park bench; 7. Box panels; 8. Trash can; 9,10,11. Garden lamp

4.2. Behavioral observation with place-centered mapping technique

Activities that occur to individual visitors in the form of sitting, walking, reading/studying, and playing cellphone. Meanwhile, group visitors held meeting activities such as organizational meetings, meetings with colleagues, taking graduation photos, and pre-wedding with photographers.

On Monday morning 2 individual visitors were observed sitting, studying, and playing with their cellphones in the wetland and pedestrian hall areas. There are 2 groups of visitors who are sitting and chatting in the wetland area (Fig. 8).

On Thursday afternoon, 1 individual visitor was observed who was sitting and playing on mobile phones in the wetland area. 3 group visitors were sitting and chatting having a study meeting and taking their graduation photos in the wetland and pedestrian hall areas (Fig. 9).

On Saturday afternoon there was 1 individual visitor who was observed sitting using a laptop in the wetland area. There were 5 groups of visitors scattered in the wetland, courtyard, and pedestrian hall areas who were walking, sitting, chatting, playing with mobile phones, and playing with children (Fig. 10).



Figure 8. Visitor activities on Monday



Figure 9. Visitor activities on Thursday



Figure 10. Visitor activities on Saturday



Figure 11. Visitor activities on Sunday

On Sunday afternoon there were 5 group visitors who were observed in the wetland area and pedestrian hall. Group visitors observed were visitors who with their families sat, chatted, took pictures, played on cellphones, and played with children (Fig. 11).

In Zhang and Lawson (2009), Gehl divides outdoor activities into three categories, including (a) important activities, routine activities that must be carried out in all conditions that everyone has, such as work, school, shopping, and also activities in the movement system such as walking to work, to bus stops, and so on; (b) optional activities, in the form of activities that have a priority level under important activities. We can choose to take a leisurely walk in the afternoon or postpone it when it's not sunny; (c) social activities, emphasizing the occurrence of social processes, namely the form of physical contact and passive contact [10].

The following is a graph of the average number of visitors to the Hasanuddin University Urban Park from Monday to Sunday.

Based on Fig. 12, it can be observed that the most visitors on weekdays in the morning for age restrictions <14 years old M/F are on Tuesday, Thursday, and Friday totaling 3 people, visitors aged 15-29 years M/F are on

Monday totaling 13 people, and visitors with an age limit of >30 years M/F on Mondays and Thursdays amounting to 5 people. While the most visitors on holidays in the morning for age restrictions <14 years old M/F are on Saturday totaling 6 people, visitors aged 15-29 years M/F are on Sunday totaling 21 people, and visitors aged limiting >30 years M/F are on Saturday and Sunday totaling 5 people.

Based on Fig. 13, it can be observed that the most visitors on weekdays at noon for age restrictions <14 years old M/F are on Thursday totaling 9 people, visitors aged 15-29 years M/F are on Monday totaling 24 people, and visitors with an age limit of >30 years M/F are 9 people on Monday, Tuesday, Thursday. While the most visitors on holidays during the day for age restrictions <14 years old M/F are on Saturday totaling 8 people, visitors age limiting 15-29 years old M/F are on Saturday totaling 34 people, and aged limiting visitors >30 years M/F are on Sunday totaling 9 people.

Based on Fig. 14, it can be observed that the most visitors on weekdays in the afternoon for age restrictions <14 years old M/F are on Monday totaling 10 people, visitors aged 15-29 years M/F are on Thursday totaling 38

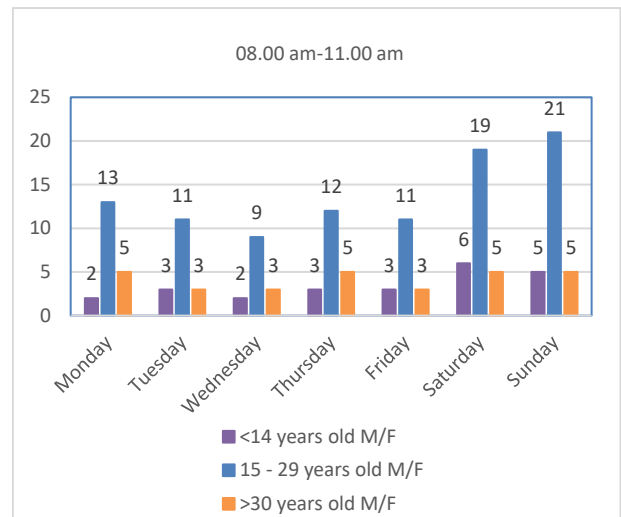


Figure 12. Average number of visitors in the morning

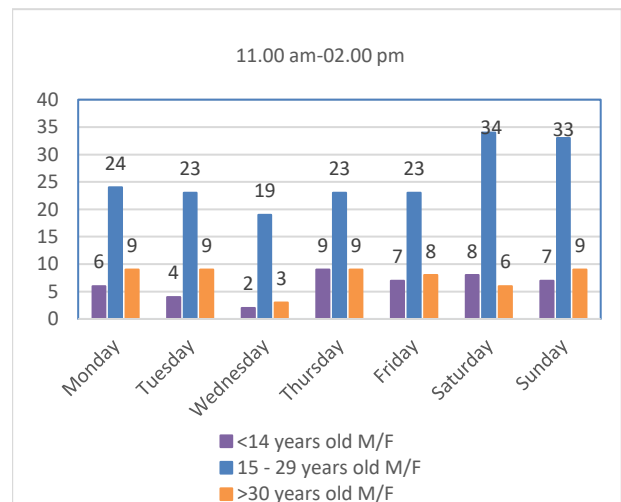


Figure 13. Average number of visitors in the afternoon



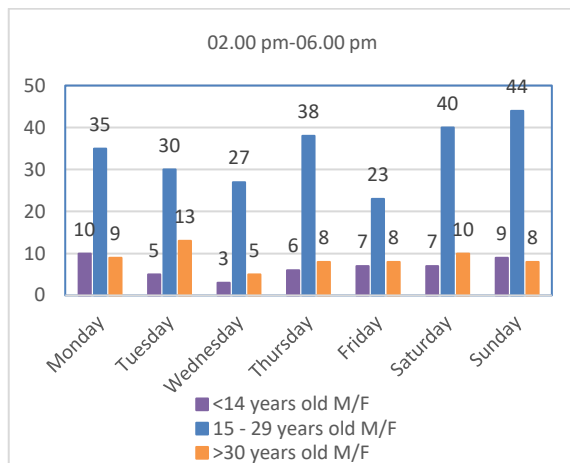


Figure 14. Average number of visitors in the afternoon

people, and visitors with an age limit of >30 years. M/F is on Tuesday totaling 13 people. While the most visitors on holidays in the afternoon for age restrictions <14 years old M/F are on Sunday totaling 9 people, visitors aged 15-29 years M/F are on Sunday totaling 44 people, and visitors aged limiting >30 years M/F are on Saturday totaling 10 people.

4.3. *The condition of the Hasanuddin University urban park based on the ideal criteria for public open space according to Kathleen Madden and project for public space*

• Sociability Ideal Criteria

According to the diagram of the ideal criteria for public open space on the sociability criteria, Unhas Urban Park is based on observations: (a) it can be visited freely and voluntarily by various groups, not limited to age, gender, and certain groups. Can be visited anytime according to campus opening hours or until 06.00 pm so there is no activity at night and there is no entrance fee to visit the park; (b) activities that occur in the form of individual activities, such as sitting, walking leisurely, selfies, studying, and group activities, that is planned activities such as recreation, group study meetings, organizational meetings, meetings with colleagues; (c) social networks can occur when interactions between individuals with other individuals, interactions between one group and another can occur by chance, unplanned with people who have never been met before. Interaction between urban park visitors that occurs is interaction only with people who come together or in their group, not interacting with other people or strangers. So, the criteria for the intangibles and measurements aspects, there are criteria that are not suitable and there are criteria that are by the conditions of the park, (Fig. 15).

Based on information through an interview with one of the visitors, a young mother in the morning, Unhas Urban Park has a good place to carry out her children's school activities outside the room, however, information about permission to use the park has not been obtained. Campus apart from being a place for education can also function as a place to fulfill psychological needs (such as recreation)

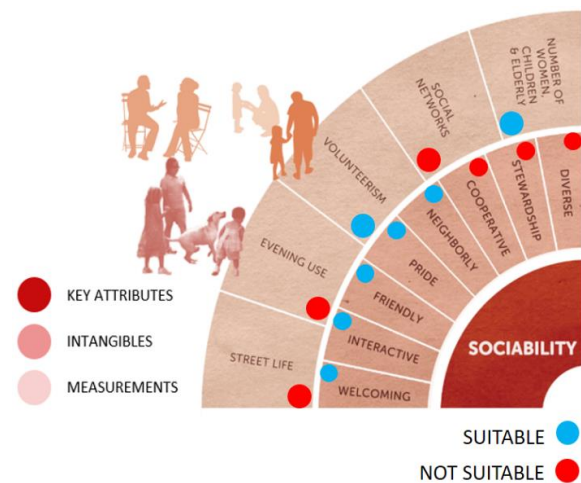


Figure 15. The compatibility of the ideal sociability criteria with the conditions of the Hasanuddin University urban park

and biological functions (green open space) that can be utilized by the academic community and the general public [11].

Based on the description above, it can be concluded that Unhas Urban Park when viewed based on sociability criteria, it appears that the activities that occur overlap each other due to the lack of space visibility in the form of public events in the park so that it affects social interaction. The social interactions that occur are interactions with each visiting group.

• Uses and Activities Ideal Criteria

Following the ideal criteria diagram for public open space in the uses and activities criteria, Unhas Urban Park is based on observations: (a) On the pattern of spatial planning, Unhas Urban Park consists of interconnected spaces that have different spatial concepts. Pedestrian hall is pedestrian traffic access both to the park and to campus which has a road width of 10.25 meters, an infinite bridge with the concept of a park area close to the lakeshore, the courtyard has a lawn concept that functions for relaxing activities, the amphitheater serves for outdoor activities with a small-scale audience, and a wetland area with wet deck area concept, has a small path that can be used for leisurely walking and sitting; (b) The activities that occur are overlapped each other, namely, the same activities are carried out by several people or groups so that they produce same or double activity, such as sitting, walking, taking pictures, and discussing with their groups. There is no commercial activity or sales activity.

Public open space must be responsive, democratic, and meaningful. Responsive means that space can be used to carry out various activities and broad interests that have environmental functions. Democratic means that space can be used by various groups of people with social, economic, and cultural backgrounds. Meaningful means that there is a relationship between space and humans as users [12].

Based on information through an interview with one of the individual visitors, she is an office worker who was taking a lunch break, that Unhas Urban Park has a cool place to take a break from the stress of work, especially in

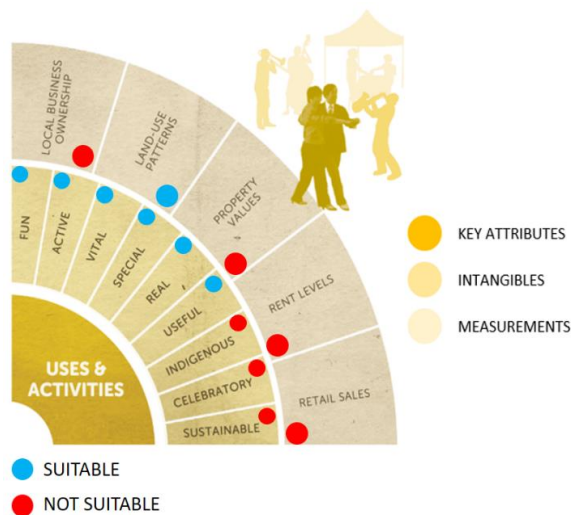


Figure 16. The compatibility of the ideal uses and activities criteria with the conditions of the Hasanuddin University urban park

the wetland area, but to visit this park, that woman needed to bring her lunch or snacks to eat in the park. This is due to the unavailability of food and drinks stalls around the park, and it is forbidden to sell in the park area. So that visitors usually bring snacks or lunch, some even order through the gofood application.

Based on the description above, it can be concluded that Unhas Urban Park is based on the uses and activities criteria, the activities that occur are activities to relax so that there are no commercial activities in the park area. Thus, the criteria for the intangible aspect have criteria that are not suitable and some criteria are by the conditions of the park, while for the measurements aspect there are no criteria that match the conditions of the park except for the criteria of spatial planning patterns (Fig. 16).

- Access and Linkages Ideal Criteria

Based on information through interviews with one of the visitor groups consisting of a mother, father, and two children. The visitor who was interviewed was the mother, in the afternoon that Unhas Urban Park, has a garden atmosphere with a large area and is not crowded for their children who like to run around. Usually, on weekend afternoons, the mother brings her children to visit the Unhas urban park. The activities that are usually carried out are walking around from the pedestrian hall to the courtyard, and amphitheater, then to the wetland area. The mother thought that some of the path lanes in the wetland began to have holes and the height of the roads was high enough for her children which made her feel worried. However, Unhas Urban Park is an alternative to visiting the park, which according to her is very cool and shady to take her children for a walk other than a playground at the mall.

Unhas Urban Park from the aspect of intangibles is in accordance with the condition of the park, namely continuity, proximity, connected, readable, walkable, convenient, and accessible, (Fig. 17). This can be seen from the finding that Unhas Urban Park has a state of interconnected space with pedestrian paths so that it is easy to access. Unhas Urban Park is seen from the aspect

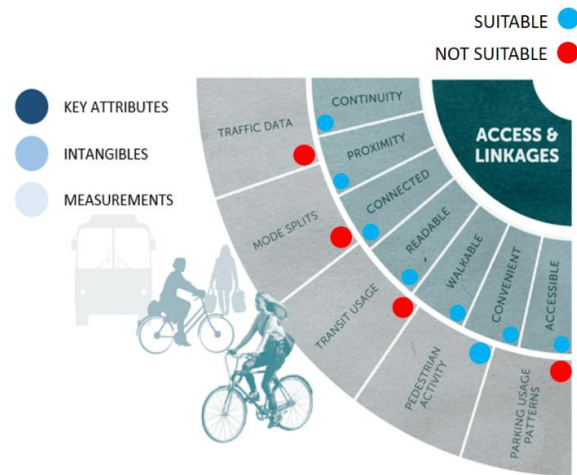


Figure 17. The compatibility of the ideal access and linkages criteria with the conditions of the Hasanuddin University urban park

of appropriate measurements, namely pedestrian activity, while those that are not appropriate are traffic data, mode splits, transit usage, and parking usage patterns, (Fig. 17). This can be seen from the observations that Unhas Urban Park is for easily accessible pedestrian traffic, and spatial planning patterns, each of which has a barrier between spaces but are still interconnected, the park is not a resting place for transit from long trips. As for the condition of the pedestrian path at several points damaged/hollow, the location and access to parking are across the park. Gehl (2011), a person in carrying out walking activities in open spaces is influenced by the distance or length of the road path and the quality of the road path both in terms of road comfort and safety [13].

- Comfort and Image Ideal Criteria

According to the ideal criteria diagram for public open spaces on comfort and image criteria, Unhas Urban Park based on observations has a beautiful and cool atmosphere that makes visitors feel comfortable to just sit back, read, play on mobile phones, and chat with friends for a long time. This is because the park is overgrown with large shady trees that serve as shade.

Based on information through interviews with several visitors, in the morning, some officers reprimanded and forbade bringing food and drinks into the wetland area because officers always get garbage wrapping food and drinks scattered around the wetlands. So that some of the visitors feel uncomfortable due to the reprimand because these visitors feel they did not do it. This shows that the lack of environmental hygiene behavior of visitors is influenced by the lack of availability of trash bins around the park, this can trigger a habit of visitors to leave their food and drink packaging waste because they do not see the surrounding trash cans. According to Shirvani (in Djainuddin., et al, 2019), public open spaces are designed according to the needs and criteria of their users so that they can provide comfort and convenience in carrying out their activities [14].

Unhas Urban Park from the intangible aspect, according to the ideal criteria such as comfort, coolness, beauty, and shadiness, (Fig. 18). Unhas Urban Park from



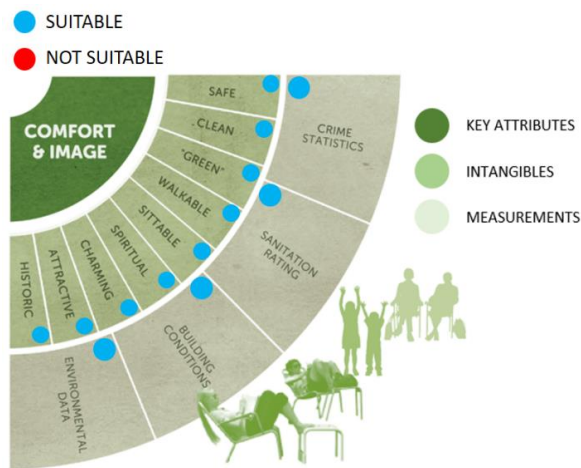


Figure 18. The compatibility of the ideal comfort and image criteria with the conditions of the Hasanuddin University urban park

the aspect of measurements, for crime statistics based on the results of an interview with one of the security guards at the security post, crimes are rare in the area, this is due to the location of the park which is close to the security post and there is no activity at night. As for the sanitation rating, in parks with sanitation conditions, flooding occurs when heavy rains occur for 2-3 days in a row, causing lake water to overflow up to the Perintis highway and gate I, as in early December 2021. For building conditions, it can be seen from the condition of the post office security and the condition of park facilities such as pedestrian paths. As for environmental data, you can use applications to measure temperature and humidity in the park area.

#### 4.4. The effect of visitor's behavior on the condition of the Hasanuddin University urban park

Human behavior is closely related to the space that accommodates them because human behavior can form patterns of activity which can also affect the shape of the space. In addition to meeting the physical aspects of the ideal criteria of public open space, the behavior of visitors, as well as users of open space, has an important role in realizing a successful public open space.

The physical environment can evoke an emotional response of both relaxed and alert awareness at the same time. In helping a person to understand his environment can be done by improving the perceived qualities that are influenced by the quality of his physical environment [15].

Based on the findings, we summarize the visitor behaviors that influence each other with the condition of the existing facilities in the park, including:

- Visitor's parking behavior with the condition of the parking space

Parking behavior is one of the concerns because it has an impact on traffic jams. Parking behavior in a city environment can be influenced by internal factors and external factors. Internal factors come from within a person such as the same desire to park in a place with many parked vehicles without having to pay attention to the situation which later becomes a habit. External factors can be in the form of lack of parking space, lack of parking



Figure 19. Visitor's parking behavior in front of the pedestrian hall: (a) Cars parked on the side of the road in front of the pedestrian hall; (b) Motorcycles parked on the side of the road in front of the pedestrian hall



Figure 20. (a) Littering Behavior; (b) Garbage strewn across the Wetland area

information boards, and the distance of the parking area from the location of the visit.

Based on observations, at busy times which occur in the afternoon, most visitors park on the side of the road in front of the pedestrian hall. This can be caused by internal factors as well as external factors, given the absence of information confirming that parking is prohibited along this road and information on the existence of parking spaces (Fig. 19).

- The behavior of visitors to the cleanliness of the park environment

The cleanliness of the urban environment is influenced by human actions in managing and tackling the waste they produce. Environmental hygiene behavior can be realized by being built, formed, and organized continuously through the actions of its inhabitants. Hygiene behavior can be realized with the presence of resources, consisting of (a) residents (people), residents need to have high motivation to create and maintain a clean environment, regularly invite, remind, and encourage each other to maintain environmental cleanliness, supervise and reprimand if there are deviations; (b) equipment, in the form of trash bins; (c) information exposure, in the form of information indirectly through information boards at several points in the park, (d) reserve resources, in the form of cleaning workers.

Based on observations, there is still a lot of garbage that is not disposed of in its place and there is only one trash can whose size is inversely proportional to the amount of waste produced by visitors, (Fig. 20).





Figure 21. Cautiousness behavior of visitors about park facilities: 1. Visitors cross to the park from the parking location; 2. Condition of a damaged pedestrian in the wetland area; 3. Broken bench; 4. The condition of the wooden bridge towards the infinite bridge pier; 5,6,7. Adult visitors and children in the wetland area

#### • Cautiousness behavior and visitor alertness

Alertness affects the sense of security when in a place, it can be in the form of the condition of the facilities available in the park, statistics on crimes that can occur in an environment, and weather conditions. Based on observations, the condition of the park pedestrians, especially in the wetland area, was damaged at several points, the condition of the roads became slippery after the rain, the condition of the park benches was damaged, and there were no pedestrian paths for people with disabilities, as well as some areas were not child-friendly, such as the pedestrian path that has different floor heights. This can increase the awareness of visitors, especially visitors who bring children (Fig. 21).

## 5. Conclusions and Recommendations

### 5.1. Conclusions

Based on the findings and discussion, it can be concluded that the condition of the Hasanuddin University Urban Park is based on the ideal criteria of public open space according to Madden and the Project for Public Space, in some aspects of intangibles and aspects of measurements on each of the existing criteria, some are appropriate, some are not. Parks seen from the criteria of sociability and social networks do not meet these criteria because the social interactions that occur are joint only in their respective groups when visiting. The park is seen from the uses and activities criteria, it is not appropriate because it has not shown commercial activities. The park is seen from the access and linkages criteria does not meet the criteria due to the arrangement of parking patterns. The park is seen from the criteria of comfort and images, the atmosphere of the park is suitable for the criteria.

The behavior of visitors at the Hasanuddin University Urban Park is influenced by the facilities in the park which affect the parking behavior of visitors, environmental hygiene behavior, and visitor alertness behavior due to the condition of the existing facilities in the park.

### 5.2. Recommendations

Based on the result of findings from the post-occupancy evaluation of the Hasanuddin University Urban Park by observing behavior (behavior mapping), the authors provide suggestions and recommendations by:

- Maintaining the existing design afterward developing and increasing the visibility of space from both the physical and non-physical aspects of the park. Space visibility is meant to create a space that increases the interest of visitors to visit and do various activities.
- Recommendations for other researchers are to conduct more in-depth research related to problems that occur in the field in detail. For this reason, it is recommended for future researchers who are interested in conducting further studies or research so that they can carry out better.

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