Visitor perceptions related to the comfort aspects of Jasdam I/BB park

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Abstract. In the development of big city cities, such as land use in the city of Medan, the increase in land use for the construction of various urban facilities and infrastructure, the impact is a change in the function of land and open space to support activities. Declining air quality can be overcome by better city park management.. Awareness of the importance of a beautiful environment and parks as the lungs of the city and recreational amenities, is realized through operational policies in the form of city parks. From the initial observations made by the researcher on the condition of the physical comfort level in the city park, the researcher formulated a problem that is how the visitors' perceptions of the level of comfort in the park I/BB Gaperta? This study aims to be able to analyze visitor perceptions of the comfort level of Park Jasdam I/BB Gaperta. The response of the community towards this park so that the role of this park is more successful in providing comfort for visitors and also optimizing its function as a public open space.

1. Introduction

The area of public open space in a city has become an important necessity in the development of the city, the city of Medan has now experienced growth in terms of population which has an impact on land use in Medan which continues to grow for the construction of various urban facilities and infrastructure. a land or green open space (RTH) to support economic activities or for residents to live. Air quality degradation can be done with maintain city parks better. With conditions of air pollution like what is happening the role of the park becomes important. Parks as a public open space must have a good impact on society. Provision of social facilities in the form of parks is a policy of the government regarding environmental care. Awareness of the importance of a beautiful environment and parks as the lungs of the city and recreational facilities, is realized through operational policies in the form of city parks [1]. Another opinion is said [2] that city parks are a place in urban areas that have a function as the lungs of the city and as a place for resting humans. For the city park to meet its demands as a comfortable place, it requires the availability of vegetation and facilities, and maintenance of both. From the initial observations conducted by the researcher on the condition of the physical comfort level that existed in the park of Jasdam I/BB Gaperta, the researcher formulated a problem issue, namely how do visitors perceive the level of comfort a park of
2. Literature Review

2.1 Comfort of garden users
Convenience is part of the response of users who comfort need to be studied, consideration of comfort aspects in planning or designing architectural products related to all human interactions with the environment. Because the role of the comfort of park users/open spaces as one of the characteristics of urban communities, it is necessary to improve the comfort of the community in using the park as a means of interaction and activity [3]. [2] states that a city park is a place in an urban area that has a function as the lungs of the city and as a place for resting humans. For the city park to meet its demands as a comfortable place, it requires the availability of vegetation and facilities, and maintenance of both. [4] Mentioning comfort can be felt both physically and non-physically. Physically based on standard needs, while non-physical (psychological) tend to human perception. Physical comfort consists of: 1. Space comfort, 2. Visual comfort, 3. Thermal comfort (temperature), 4. Audio/sound comfort. Comfort factors include space, connectivity between zones, number of facilities, scenery, use of suitable materials, and the influence of the surrounding environment including shade [5]. Psychic comfort is based on the feelings of each individual. In the sense of psychological comfort is a state of mind that expresses the level of satisfaction a person has towards his environment. So the effort to gather information about the quality of comfort will involve a process of a sensation of comfort. Gifford in [6] explains that the process of sensation is the part of the overall perception process.

2.2 City parks and their functions
Plan and design city parks as architectural sciences, is an open space that is used every day by the community to interact and act, in addition to its function as oxygen supply and complementary needs for green open space in urban areas [7]. The existence of a park as a public open space can indirectly affect the character and culture of the people in an urban area, because ideally, a city park must be able to integrate the environment, society, and health through an ecological approach to community health and welfare based on contact with nature. In other literature it is said that green open space (RTH), both public green open space and private green open space, the main function (intrinsic), namely ecological functions (green vegetation), and additional functions (extrinsic) namely architectural, social, and economic functional functions, these four main functions are in accordance with the needs, interests and sustainability of the city [8]. City parks are open land with social and aesthetic functions as a means of recreational activities, education or other activities at the city level. City parks are intended to serve residents of one city or part of the city. City parks should be an important component of the construction of a city that succeeded. in [9]

2.3 Community perception of a place
Perception is a mental activity that allows humans recognize the stimuli that arrive at them, with this ability humans/individuals recognize something. But what is perceived can not be by with the circumstances, then the perception must be seen from several individuals. Another opinion says perception is defined as a process that integrates, and organizes our sensory data (sensing) to be developed in such a way that we can realize around us, including being aware of ourselves [10]. According to [11] Perception is essentially a cognitive process experienced by everyone in understanding information about their environment, both through vision, hearing, appreciation, feeling, and smell. The key to understanding perception is to recognize that perception is a unique interpretation of the situation, rather than a correct recording of the situation. There are several subprocesses in this perception, and can be used as evidence that the nature of perception is a complex and interactive thing the process in question is: 1. Stimulus
(stimulation) is present, the beginning of the occurrence of perception begins when someone is faced with a situation that can be a stimulus direct sensing or in the form of a complete sociocultural and physical environment. 2. The intended registration is a physical mechanism in the form of sensing and nerves of a person affected, the physical ability to hear and see will affect perception. 3. Interpretation is a cognitive aspect of perception that is very important. The process of this interpretation depends on the way of learning (motivation), motivation, and personality of a person will be different from others. So that people's perceptions formed by the perception of the individual can not be separated from the elements contained within the community itself. Another factor is the presence of external elements that occur due to interactions between people. Community perceptions will differ from one another based on the level of knowledge and experience of the community towards a place.

3. Methodology
Data collection was carried out using the Grounded Theory approach method [12] Data was obtained by distributing open-ended questionnaires to obtain keywords related to the comfort aspects thought or felt by respondents towards city parks as a means of social interaction between communities. [13]. Sample selection is used with accidental sampling [14]. Respondents who participated in filling out questionnaires numbered 52 people, which were conducted online. The selection of respondents is based on the review data found on the google maps application that marks the Park/Field Jasdam I/BB. Respondents who participated were respondents who could use technology, the researchers hoped the resulting answers were more open because the respondents had enough time to answer the questions contained in the questionnaire. In there will be a question that asks the respondent to explain their opinions regarding aspects or matters that affect the comfort of a city park. Data analysis is done by the content method (content analysis) that is used with the aim of collecting all respondents' answers related to the comfort level of the city park. In this method, three stages of analysis are carried out, namely open coding, axial coding and selective coding [12].

- The stage of open coding, is the stage of identifying keywords that have been obtained from respondents' answers in the form of text data related to the comfort level of the city which will be further investigated. After identifying, one respondent could mention more than one keyword.

- Stages of axial coding, after the keywords are obtained and collected from text data, the next is to group them into categories that have been determined according to the proximity of the meaning of each keyword.

- Stage of selective coding, which is the stage after selecting the categories of keywords collected to then make connections between categories and frequency calculations. The relationship between these categories is obtained by conducting frequency distribution analysis and correspondence analysis.

4. Result and Discussions
The initial analysis conducted by the researchers was to identify answers from respondents who related or meaningful about comfort, this stage is the stage of open coding, one respondent's answer could mention more than one key word related to comfort. Based on answers from respondents obtained keywords related to the comfort of the park I/BB Jasdam namely "can meet the needs of park users", "there is a seat", "good running track", "free of garbage", a place to trade regularly "," clean "," Lots of trees "," arrangement of plants ",& cool, green, not noisy ",& there are facilities/sports equipment ",& there is a resting place". After examining the key words from the respondent's answer the next step is axial coding. The key words that researchers have obtained are grouped based on the similarity of their meanings. Grouping is done so that the specified category is not subjective. At this stage, there were 13 categories of
park comfort aspects based on the opinions of respondents. Some of the categories of comfort parks can be seen in the following table.

**Tabel 1. Axial coding aspects of the comfort of the park.**

| No | Kategori | Key words |
|----|----------|-----------|
| 1. | Adequate garden facilities | 1. There is a resting place  
2. Running track/pedestrian path  
3. Toilet/Bathroom  
4. Sport facilities  
5. Trading place/food court  
6. Easy access |
| 2. | Vegetation elements and their effects | 1. Many trees  
2. Cool/Shady  
3. Plant arrangement  
4. Noise |
| 3. | Cleanliness | 1. Rubbish free  
2. Trash can  
3. Clean and neat  
4. Air pollution free |

From grouping keywords into several categories, this is done to analyze the frequency of which categories are the most frequently spoken by respondents, which category is the most dominant frequency can explain the perceptions of respondents who are park enders related to how comfortable in the park Jasdam I/BB. From the results of the frequency/distribution of keywords said by visitors, vegetation elements were obtained and the effect was the highest frequency category and was mentioned 47 times by respondents, Jasdam I / BB park infrastructure was mentioned 45 times by respondents, net was mentioned 35 times by respondents, safe mentioned 24 times by respondents. Apart from the highest category mentioned by respondents, there were also categories that were mentioned less by the respondents, among others, pollution was mentioned 21 times by respondents, the park located in the Army office area was mentioned eight times by respondents, the park area was mentioned 7 times by respondents, as well as visually beautiful 5 times mentioned by respondents.

From the explanation of the comfort criteria according to respondents, it can be seen vegetation elements and their influence in this case the number of trees, especially trees with wide crowns and other plants, greatly influences visitors' perceptions regarding the comfort aspects of the park. Furthermore, other criteria that are aspects of comfort are garden infrastructure facilities viewed from the complete facilities, conditions of facilities and flexibility/convenience of using them. The clean, beautiful and cool environment of a garden environment is a combination of convenience that can influence the perception of visitors to use the park as a socializing container. In addition, the results of distribution frequency also explained that the parks in the office area had no major influence, also related to the area of the park did not have a significant effect by the respondents, it can be concluded that the park which is in an office area and has a small area does not have an impact on the visitors garden.
After obtaining distribution analysis data, the next step is to do correspondence analysis or what is also called the selective coding stage. Because the questions posed are open, respondents can mention a number of keywords when giving answers, through this stage we can find out which keywords are mentioned by respondents simultaneously, this aims to see the relevance of categories of comfort aspects with people's perceptions of using/utilizing the park city. The results of the analysis can be seen in the diagram below.

**Diagram 1.** Dendrogram correspondence analysis related to criteria comfort and public perception.

From the diagram above can be drawn some conclusions relating to the criteria and perceptions related to the comfort of the park Jasdam I/BB. The closer the distance of the categories in the diagram, the higher the level of linkages/connections. Among them that the criteria for a comfortable city park for sports are parks that must be pollution free, the vegetation elements must be dominant. In addition, the diagram above also shows that there is a resting place such as the Gazebo which is protected from noise and the condition of a good and clean and neat toilet will give a comfortable impression on the garden. Then the arrangement of the park and the condition of the area that is free of rubbish as well as the ease of access on each side of the park make the aspect of comfort can be fulfilled in the park Jasdam I/BB.

5. Findings
Based on the results of the analysis in this study, it can be interpreted that visitors' perceptions of the comfort aspects experienced are also part of the psychological response, where visitors feel comfortable and satisfied with a place, in this case research on park visitors' perceptions as an architectural product.

6. Conclusions
The results of the analysis of this study concluded that the perception of park visitors regarding aspects of comfort is influenced by elements of vegetation or the number of shady trees that make the park cool and beautiful. The existence of this vegetation also influences the comfort of temperature in the Jasdam I/BB park and the surrounding area. In addition to the existence of vegetation, the provision of garden infrastructure and garden facilities must also be good, because this also affects the comfort of visitors in the Jasdam I / BB park. Another thing that is also important and influences the comfort of visitors to the park is the cleanliness of the park area that is maintained, and the security of the city park from acts of
crime and possible things related to security in the Jasdam I/BB park area. Respondents' answers related to visitor perceptions of aspects of comfort in activities in the park can also represent the opinions of park visitors at Jasdam I/BB, because the respondents involved in this study came from different backgrounds, ranging from students, employees, to professionals such as doctors and architects.

However, because data collection is not done directly at the research location, this shows that respondents understand technology, so the authors hope that there will be further research by distributing questionnaires to the location and involving more respondents. Furthermore, this research can be used as a reference to improve the quality of Jasdam I/BB parks related to the convenience of visitors.

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