

## **Evaluation of Urban Green Open Space Asset Utilisation (Study of Tourism Perception and Preference in Bandung City Parks)**

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### **Abstract**

Urban Green Open Space/Ruang Terbuka Hijau Kawasan Perkotaan (RTHKP) is an essential part of the urban population ecosystem, one of which is the City of Bandung. One of the uses of RTHKP is as a city park, an alternative for tourist activities. This study aims to evaluate the use of City Parks as one of the RTHKP assets by understanding the perceptions and activity preferences of residents of Greater Bandung (Bandung City, Bandung Regency, West Bandung Regency, Cimahi) related to city parks in Bandung City. This research uses quantitative methods with descriptive analysis to understand perceptions and preferences as well as regression and correlation analysis to understand the relationship between the two variables. Two hundred sixty-five resident respondents who have visited one of the eleven city parks in Bandung City have completed the questionnaire. The result is that the City Park aspect in Bandung City can be a place for recreation and a children's playground that gets the highest score for perceptions and willingness to use public transportation, and the safety aspect still needs to be considered. Meanwhile, for activity preferences in city parks in Bandung City, the highest position is a place for refreshing, recreation and sports, and the lowest is for socialising and inviting children to play. There is a significant relationship between the perceptions and preferences of residents of Greater Bandung, especially for recreational and refreshing activities.

**Keywords:** Perceptions, Tour Preferences; Urban Tourism; Green space; Bandung City Park; Recreational

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### **A. INTRODUCTION**

City Parks can be an alternative to doing tourism activities for both visitors and local residents. City Parks usually utilise urban green open spaces (RTHKP) which are usually managed by the government or other community organisations. (Chan et al., 2018). It is undeniable that city parks have many benefits, one of which supports the *healthstyle* of urban communities (Zhang et al., 2021). However, many parks that develop in urban areas are not optimally managed, which can cause problems (Peschardt & Stigsdotter, 2018). (Peschardt & Stigsdotter, 2013).. Problems arise due to several things such as lack of public awareness, poor maintenance, lack of security and lack of facilities, which can reduce sports and social activities of the local community. (Abdelhamid & Elfakharany, 2020)..

In addition to the above problems (Peschardt & Stigsdotter, 2013)(2013) also discusses the limited space so that it is minimally utilised. Even Gidlow et al. (2012) corroborate that parks are also intended for tourists who come from outside the city, not just for local tourist activities. This land limitation also occurs in the city of Bandung with uneven development. (Widyahantari & Rudiarto, 2018).. Whereas Green Open Space (RTH) in Bandung City reaches 3,802 hectares or 22.59% which is managed by the public and around 581.51 hectares or around 3.45% (Naldi & Indrianawati, 2018). (Naldi & Indrianawati, 2018).. No data on the total area of city parks could be obtained until this research was written.

Beyond the various problems that arise in the City's parks, there are various perceptions and preferences that arise from each individual. (Basu & Nagendra, 2021; Farahani & Maller, 2018a) visitors whether it is from local residents or outside the area (Chan et al., 2018). Chan (2018) continues his explanation that urban park management needs to meet the expectations of visitors

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from various backgrounds. Urban park managers need to think about the increasing need to be able to carry out increasingly high tourist activities despite limited land. (Chan et al., 2018). Perceptions are considered to form preferences that result in preferences from city park visitors. Sugiama (2013) revealed that city parks can be a characteristic, identity of the city with various functions such as air refreshment and so on. City parks can also be useful for tourism activities including reducing the stress of urban communities. (Sugiama, 2013).

Not many studies have discussed in detail the three important parts of this study, namely how the perceptions and preferences of visitors to urban parks in Bandung City and the three relationships between visitor perceptions and preferences for tourism activities. There are several dimensions that can be used to evaluate and measure perceptions and preferences or the relationship between the two, especially in urban parks. In this study there are four dimensions used, for perceptions and five dimensions for preferences. More clearly shown in the table below.

**Table. 1. Operational variables Perception and activity preferences**

No.	Variables	Dimensions	Source of Reference
1	Perception	1) Recovery  (2) Functionality, (3) Accessibility, (4) Safety	(Farahani & Maller, 2018a; Peschardt & Stigsdotter, 2013; Zhang et al., 2021) (Sanesi & Chiarello, 2006) (Pot et al., 2021) (Farahani & Maller, 2018a; Janson & Wrycza, 1999; Zhang et al., 2021)
2	Activity Preferences	(1) Socialisation, (2) Recreation, (3) Recovery, (4) Exercise, and (5) Children's play	Farahani and Maller, 2018 Zhang et al., 2021

To answer the third objective of this study related to the relationship between perceptions and preferences of visitors to urban parks in Bandung City, the author proposes two hypotheses, namely:

Ha There is a positive and significant influence of visitor perceptions on tourism activity preferences in city parks in Bandung City.

Ho There is no effect of visitor perceptions on tourism activity preferences in parks in Bandung City.

## B. RESEARCH METHODS

The research method used in this study is quantitative. There are several methods in analysing the data and answering the three research questions, namely first using descriptive analysis to understand perceptions and preferences of tourism activities. Second, using regression and correlation analysis to understand the relationship between the two variables. Based on Veal (2018) descriptive analysis is useful for expressing the results of data obtained from research in the field of tourism. Some studies also use descriptive analysis to understand how perceptions and preferences of a matter by finding the average value (mean) of a variable. One of them is from Farahani and Maller (2018b) who relate perceptions and preferences about *urban space* and Zhang et al. (2021) related to perceptions and preferences with *green space*.

This study aims to understand the perceptions, preferences and the relationship between the two related to green spaces based on the perceptions of Greater Bandung residents. The study was conducted over five months from June to October 2022. There were a total of 339 respondents who completed the questionnaire in this study. After checking, 263 respondents lived in Greater Bandung, namely Bandung City, Bandung Regency, West Bandung Regency and Cimahi City. The number of respondents is believed to be sufficient for evaluation and representative of the respondents in this study.

This research uses an *online survey* instrument, namely a google form that is distributed through various media, such as WhatsApp using the *snowball* technique. After getting respondents from the circle of friends, then ask them to spread it also in their circle of friends and continue. The online survey was also sent through a potential whatsapp group. In the online survey, there were several questions to filter and validate the answers, such as whether the respondents were residents of Greater Bandung, had visited the City Park in Bandung City. Research instruments are one of the keys to the success of research, in addition to being a data collection tool, it also makes it easier to get large quantities of data (Creswell, 2014). (Creswell, 2014).

In analysing the relationship between perception and preference variables, regression and correlation analyses were used using SPSS. The use of the two variables of perception and preference in looking at urban space utilisation has been used by Farahani and Maller (2018b) in their paper related to the literature review of Chang et al (2021) on green open spaces.

### C. RESULTS AND ANALYSIS

#### Respondent Profile

Based on data from 263 respondents, most of the visitors live in the city of Bandung, namely 47%, the majority age range 17-24 years to 64% and are women (57%). This means that there are indeed many residents of Bandung City who visit and do tourism activities in the city park in Bandung City. The Bandung City Government made a city park one of them to be enjoyed by the citizens of the city itself. Of the 263 respondents, most of them visited Gasibu and Tegalega Fields, namely 45% and 40%, the rest were Bandung City Square, Babakan Siliwangi Park and others. More clearly can be seen in the data below.

**Table 1. Respondent Profile**

Kriteria	Category	n	%
<b>Place of residence</b>	Bandung City	123	47%
	Cimahi City	39	15%
	West Bandung Regency	45	17%
	Bandung Regency	56	21%
<b>Age</b>	17 - 24 years	168	64%
	25 - 34 years	29	11%
	35 - 44 years	49	19%
	45 - 54 years	9	3%
	55 - 64 years	8	3%
<b>Gender</b>	Men	111	43%
	Women	152	57%
<b>City Park visited</b>	Tegalega Park	105	40%
	Lapang Gasibu	119	45%
	Maluku Park	6	2%
	Babakan Siliwangi Park	8	3%
	Elderly Park	6	2%
	Dewi Sartika Park	0	0
	Scout Park	1	0%
	Bandung City Square	14	5%
	Ganesha Park	1	0%
	Taman Cilaki Tengah	1	0%

Kriteria	Category	n	%
	City Hall Courtyard Park	2	1%

### Perceptions of Visitors to City Parks in Bandung City

Visitors' perceptions of Bandung city parks were measured by five sub-variables, namely: 1) restoration, 2) functionality, 3) accessibility, and 4) safety. (Basu & Nagendra, 2021; Farahani & Maller, 2018b; Zhang et al., 2021). Based on the Likert scale that, 5 is very high and 1 is very low, which is clearly seen in table 2 below, it can be seen that the respondents' perceptions have a fairly high average value. The highest value is in points 3 and 2, namely the function of the city park. Visitors feel that urban parks in Bandung City are fun areas for children and are recreational places to meet many people. On the other hand, safety still has the lowest score, followed by willingness to spend money to use public transport. This means that most respondents still do not feel safe when visiting city parks and do not make public transport the main transport when going to visit. Finally, which has an average value of 3.91 and is in the middle compared to other sub-variables, namely visitors to city parks feel that there are many things that can be found and seen in city parks in Bandung City. Clearly seen in the table below,

**Table 2: Perceptions of visitors to urban parks in Bandung City**

No.	Statement	Average Value
1	There are many things to discover and see in the city parks in Bandung.	3.951
2	I believe the important function of city parks in Bandung City is as a place for recreation and meeting people.	4.247
3	I think the important function of urban parks in Bandung City is as a fun area for children.	4.251
4	I am willing to pay a fee when using public transport to get to city parks in Bandung City.	3.711
5	I feel that city parks in Bandung City are safe from crime	3.160

Mean score descriptions: 5 = strongly agree, 4 = agree, 3 = average, 2 = disagree, 1 = strongly disagree

### Preferences for tourism activities in Bandung City Park

Respondents' preferences were assessed from the activities they carried out in Bandung city parks, as stated by Zhang et al ((2021) and Farahani and Maller (2018c) namely 1) socialising, 2) walking pets, 3) recreation, 4) recovery 5) exercise, 6) taking children to play. From the table of preferences for tourism activities in city parks in Bandung City below, it can be seen that the overall average answer is Agree that City Parks in Bandung City have several alternative offers in their tourism preferences. The statement that gets the highest score is that the city park in Bandung City is one of the places to do *refreshing*. The smallest in this variable is the purpose of being in a city park in the city of Bandung is to socialise. More clearly can be seen in table 3 below.

**Table. 3 Preferences of tourism activities in Bandung City Park**

No.	Statement	Average value
1	My main purpose in visiting urban parks in Bandung City is to socialise with other people.	3.407
2		4.030
3	My main purpose in visiting city parks in Bandung is for recreation.	4.084
4	I feel that the city parks in Bandung City are a great place to do some <i>refreshing</i> . I feel that city parks in Bandung City are more attractive because they can be a place to exercise.	4.065
5	The main purpose of my visit to the city park in Bandung was to take the kids out to play	3.821

Average score description: 5 = strongly agree, 4 = agree, 3 = average, 2 = disagree, 1 = strongly disagree

Many visitors use Bandung city parks as a place to *refresh* and exercise. This supports the results of previous research, that the public visits parks to unwind and exercise. (Cohen et al., 2019; Floyd et al., 2008).. Some parks are indeed very supportive for doing sports both walking and running, such as Tegalega park and Gasibu field. City residents need facilities and infrastructure that support them to get out of daily work activities and city parks are an alternative because they are close and do not need to spend excessive costs. These results support previous research that city parks can be a place to unwind and relax and to maintain health (Derose et al., 2021). (Derose et al., 2021; Konijnendijk, Matilda V.D.B, et al., 2013; van Dinter et al., 2022).

### The influence of perception on activity preferences to urban parks in Bandung City

#### Regression Analysis

Based on the ANOVA Table below, it is known that the significance level is 0.000 and smaller than 0.05 so that the regression model can be used to predict the effect of the perception variable on the preference variable. The regression analysis results **show** that the perception variable has a positive effect on the preference variable.

**Table 4. Regression Analysis (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	649.036	1	649.036	101.248	.000 <sup>b</sup>
	Residuals	1685.930	263	6.410		
	Total	2334.966	264			

Description: The constant variable is perception and the dependent variable is Preference

The highest visitor perception that Bandung city parks are suitable for children's activities has a positive effect as one of the reinforcing factors that they will invite their children and at the same time become a place to refresh their minds and bodies after busy work. These results support the findings of previous research that parks are a focus to be used as a place to relax, support in restoring physical condition (Derose et al., 2021). (Derose et al., 2021; Konijnendijk, Matilda Annerstedt, et al., 2013; Konijnendijk, Matilda V.D.B, et al., 2013; Malek et al., 2012)..

With regard to the perception of security that is considered mediocre by respondents, it could be that respondents are reluctant to socialise with others in Bandung city parks. The city government or *Destination Management Organisation* (DMO) of Bandung or West Java needs to ensure that the safety of activities in city parks is paramount. Complex factors such as diverse markets, political agendas and market evolution are decisive factors for developing a destination so that it can survive without being affected by the destination life cycle. (Andrianto & Kusumah, 2021)..

#### Correlation Analysis

Based on the table below, it is known that the correlation value for the perception variable on the preference variable is 0.527. According to Guilford in Sugiyono (2017) the criterion for interpreting a correlation of 0.40 - 0.59 is moderate. This means that between perceptions and preferences have a moderate relationship. It can be stated that the higher or better the perception of visitors, the higher or better the preference for activities to city parks in Bandung City. In line with research from Sugiana (2013) that people hope that green spaces can have characteristics that show the identity of the city that is different from the others. City residents' preferences that city parks can also improve the beauty of the environment, reduce the stress levels of its citizens and also support the development of tourism. (Sugiana, 2013).

Table 5. Correlation analysis

		Perception	Preferences
Perception	Pearson Correlation	1	.527**
	Sig. (2-tailed)		.000
	N	265	265
Preferences	Pearson Correlation	.527**	1
	Sig. (2-tailed)	.000	
	N	265	265

\*\* . Correlation is significant at the 0.01 level (2-tailed).

One of the keys to destination development is the development of tourist attractions that become a magnet for tourists to come and do activities in addition to three other components, namely accessibility, amenity and ancilari. (Andrianto & Sugiama, 2016).. Currently, visitors' perceptions of tourism activity preferences in Bandung city parks are still not high or ordinary. It could be that not many people know what tourist activities can be done. By improving perceptions, activity preferences in Bandung city parks will improve and vary.

#### D. CONCLUSIONS

There are three main points as conclusions from this research. Firstly, in terms of visitors' perceptions, most felt that urban parks in Bandung City function well as recreational areas and are fun for children. Most also think that the government needs to ensure the safety and affordability of public transport to the city park. Secondly, in terms of tourism activity preferences, most visitors consider urban parks in Bandung City to be a good place to refresh the mind and body including as a place to exercise. Most others consider social interaction with other people to be the least. This could be due to security concerns that the government still needs to address.

The third conclusion is that the perception variable has a positive effect on the preference variable with an average moderate correlation relationship. This study found that visitor perceptions have a moderate effect on tourism activity preferences. Most visitors have the perception that city parks in Bandung are suitable for children and a place for *refreshing*, this results in most visitors utilising city parks to play with their children and refresh their minds. The correlation between perceptions and tourism activity preferences in the medium category could be because there is not much information related to city parks in Bandung.

The weakness of this article is that it only discusses two research variables and does not discuss the consequences of these two variables. Future research can use intention to visit or revisit by also including marketing media or information media as latent variables. This article also focuses on finding answers from online surveys without digging into more detailed answers from interviews. Future research should also explore the reasons and more detailed information related to the reasons why they have perceptions and preferences for tourism activities in city parks in Bandung City. Considering the number of visitors, both city residents and non-city residents of Bandung, the number of respondents should be more than 500 respondents so that it can be processed to find better answers.

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