

Teenager Perceptual Assessment Factors to the City Park Aesthetics at Surabaya Bungkul Park

Amir Mukmin Rachim^{1,2*}, Antariksa³, Surjono⁴, Lisa Dwi Wulandari³

¹Environmental Science Doctoral Degree Program, Brawijaya University, Malang, East Java,

²Department of Architecture, Institute of Technology Adhi Tama, Surabaya, East Java,

³Department of Architecture, Brawijaya University, Malang, East Java,

⁴Department of Urban and Regional Planning, Brawijaya University, Malang, East Java, Indonesia.

Received: May 23, 2017

Accepted: August 17, 2017

ABSTRACT

In an effort to eliminate boredom because of routine, teenagers in urban areas usually visit City Park for cool, natural and aesthetic atmosphere. City Park has become a necessity for them. The problem is, what factors play in the perception of teenagers in evaluating the aesthetics of City Parks. The purpose of this study is to analyse and determine the factors. To support the data, an examination on the results of previous studies was conducted. The descriptive research method was employed through field observations by distributing questionnaires to teenagers as the respondents. Data collection was performed using random sampling. Analysis and discussion were done by sorting and counting each respondent selected variables (quantitative) before it was evaluated to determine the factors of teenager's perception in evaluating City Park aesthetics. This study showed that the arrangement and diversity of vegetation, facilities, safety and comfort of City Park were the main factors used by teenagers in evaluating the aesthetics of city parks. This research supports the emergence of a new theory about teenager's perception on City Park aesthetics, as well as contributing to the development of knowledge through new research on City Park.

KEYWORDS: factors, evaluation, perception, teenagers, aesthetics, city parks

INTRODUCTION

Aesthetic work in the environmental scope has transcended the beauty of the general environment even though the environmental aesthetics are still based on nature, rural, urban, large, small, ordinary, and extraordinary issue. The aesthetics of the environment offer many things to see, hear, and feel. The society may spent some of their time to enjoy the aesthetics of the environment [1]. Open green space that has a plaza with all the amenities such as benches, tables, fountains, toilet, and cafe or a shaded rest area is actually an ideal and flexible garden/park idea [2]. Some of Australia's old towns that have old parks have undergone a reformation in a rejuvenated manner with the aim not only to improve the quality and quantity of green open space but also to widen small parks in the same destination[2]. City Park is a place to gain a cool, freshness, tranquil and beautiful atmosphere for urban communities, including young people. City Park has become teenagers' needs for facilities used as the completion of aesthetics and recreational areas [3]. City Park facilities are made up of hard components such as street paving, pots or vases, playgrounds, garden lamps, statues, fountains, as well as natural components such as vegetation in the form of grasses, shrubs, ornamental plants, shade plants, naturally flowing water, air, wind and small animals who live there [3]. The ideal collaboration between corporations, government agencies, architects, and urbanites to find partnerships for the final outcome of the public services (park) has begun to draw the attention of policymakers based on the common interests between communities, families, and community groups including children and teenagers.[4].

Teenagers and children admit that they enjoy the beauty and use various facilities in city parks, which are located close to their schools [5]. Children and adolescents are pleased with games, small bridge walking, trees climbing, and several obstacles such as shrubbery because their activities in the environment and park can improve their aesthetic fantasies [6]. Green Open Space and Parks could provide services either in the form of relaxation and emotional warmth as well as the in the services of social, economic, cultural, even psychological to a diverse group of urban societies [7]. One of the goals in this aesthetic environment is to shape the feeling of the society, including teenagers, because aesthetics is one of the social process in our society[8]. Surabaya has 54 active city parks with a total area of 303.561 m² [4]. One of the parks is Bungkul park with a total area of 14.517 m² [9]. This park has easily accessible location as it can be reached through the east road of Darmo Street, one of the main street in Surabaya. Bungkul park is visited by many groups of young people and students on holidays and on weekdays both in the afternoon and evening. The phenomenon distinguishes Bungkul park from other city parks in Surabaya which make it interesting to be studied. Previous observation indicated that teenage visitors come to this park to enjoy the beauty, the facilities, the diversity and arrangement of the vegetation, and the healthy and clean atmosphere which provide a comfort feeling.

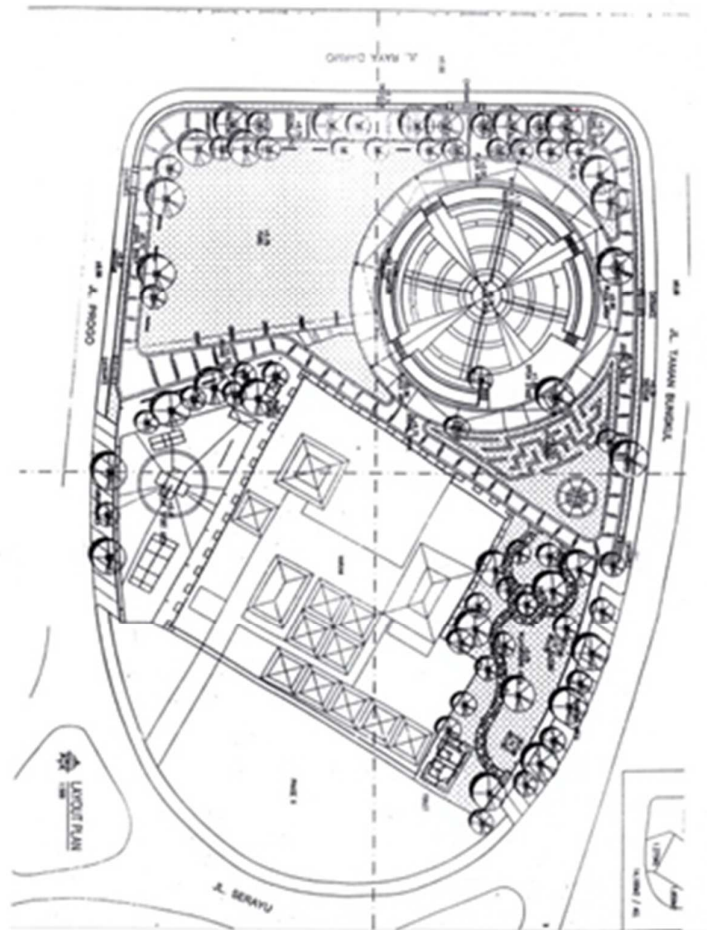
*Corresponding Author: Amir Mukmin Rachim, Environmental Science Doctoral Degree Program, Brawijaya University, Malang, East Java, (INDONESIA), Email: amirmritats@gmail.com

After being renovated by Surabaya City Government, Bungkul Park received a prize as the best city park in Asia by winning 2013 Asian Townscape Award from the United Nations. Various facilities in this City Park includes skateboard track, jogging track, plaza (scene for a live performance of different types of entertainment), free Wi-Fi zone, public telephone, green park area with a fountain, children playground and food court which all can be used by teens freely.

The study aims to analyse and find the factors which influence the evaluation perception of teenagers on city park aesthetics. The research method used was descriptive with direct field observation through questionnaire distribution to teenage respondents. Data collection was done by random sampling. Analysis and discussion was performed by sorting and counting each existing variable (quantitative), so that number output in each of the variable made up the ranking. The three highest ranks were considered as factors of teenager evaluation perception on City Park aesthetics. The benefit of this research is to evoke a new theory, namely the factors of evaluation perception of teenagers on the aesthetics of city park, which are very different from the common perception where the main city park function is a place of social interaction

MATERIALS AND METHODS

The research site was Bungkul Park Surabaya. This City park was an active park located in Darmo Main Street, South Surabaya, Sawahan District (Figure 01).



**Figure 1.Lay Out Plan Sketch Sized about 14.517,00 m2 located in Darmo Main Street, Surabaya.
(Source: Department of Cleaning and Park Maintenance of Surabaya, 2013)**

The City Park had a wide range of facilities for teenagers and children activities (Figures 02 and 03). The descriptive study employed simple random sampling in the data collection. Analysis and discussion were performed by sorting and counting the number of voters of each variable (quantitative).



Figure2. Atmosphere of Bungkul Park View from Darmo Main Street or from front teenage
(Source : Author, Oktober 2015)



Figure 3. Teenage visitors at 18.15 p.m.
(Source: Author, 5th October 2016)

The process was as follows: a) Find variable of factors of teenager evaluation perception on the aesthetic of city parks from 100 teenage respondents. b). Questionnaire dissemination by listing the selection of variables which were found prior to pooling according to the level of education, age and gender, to determine three most chosen variable based on the perception of teenagers. The highest three ranks were considered as the supporting factors of teenagers evaluation perception on the aesthetics of City Park. The choice of 100 teenage respondents was aimed to make the calculation of the percentage easier, and this figure was in agreement with the sampling theory, which was between 30-500 samples [10], as presented in Table 1.

Table1. Pooling of Variables of Teenager Evaluating Perception on City Park Aesthetics at Bungkul Park Surabaya

No	Variables of Teenager Evaluation Perception on City Park Aesthetics at Bungkul Park	Respondent Numbers
1	Facility completeness of City park	22
2	Safety and comfort of visitors in City park	18
3	Arrangement/ diversity of vegetation in City park	25
4	Social interaction in City park	12
5	Cleanliness/health of City park	15
6	No idea	8
	TOTAL	100

Note: Selected respondents aged 15 to 20 years.

(Source: Direct observation on Bungkul Park, Surabaya in September 2016)

Of the six selections of respondents, five options were taken as variables, namely: 1) Facility completeness of City park, 2) Safety and comfort of visitors in City park, 3) Arrangement/ diversity of vegetation in City park, 4) Social interaction in the City park, 5) Cleanliness/health of the City park. The sixth variable was not included as one of the variables because in addition to the small amount, they might not give a clear answer.

RESULTS AND DISCUSSION

Shading which is formed by canopy trees (vegetation) will affect the air temperature in a street corridor, including streets in the open space area for public and city parks, because the shadows will reduce the effects of solar radiation and results in a comfortable temperature of the street corridor. That means one of the aspects which affect the comfort of city park is the air temperature of the city parks [11].

It is often occurred that the emergence of new functions on the city square/open space is the result of designer's different thoughts with the community (user) in interpreting the city square/open space. Another forgotten aspect in the provision of city square/open space facilities which in this case includes the City Park is the addition of user activity facilities to that park. Unconsciously, this condition will create new spaces that will be interpreted differently by [12]. Two hundred years ago, from the total population, only 20% of them who occupied the urban area while today there has been enormous urbanization reaching 80%. Green open space and city park are an inseparable part of the city's quality of life and the importance of this infrastructure has been recognized to facilitate sport, recreation, and relaxation both for private, organizations, and companies. [13], The forest vegetation group that forms the city park is an approach and implementation that is intended to achieve the purpose of protection, recreation, aesthetics, and other functions for urban communities.[14]. The environment of urban forest vegetation can be formed from the components which are in urban areas such as green lanes, gardens, recreation areas, landscaped grounds, and city parks[14]. Leopold underlined the importance of protection against environmental aesthetics which also includes city park[1]

In Northern England and Western Norway, the diversity of vegetation grown with various color of flowers and various types of grass owned by outer space or landscape is actually the people's preference [15]. Switzerland, besides selecting the diversity of the vegetation types, many people also point to the diversity of flowers that exist in the outer space and park as a place of recreation and aesthetic tourism. The people there agree that the diversity of grass on the outer space and garden also has a high aesthetic value[15]. City parks are generally used by people as an aesthetic accomplishment, fresh air fulfillment, recreation, relaxation, a place to eliminate boredom, a place to mingle with family or friends - as well as a variety of other activities[16].

Surabaya government have built dozens of active city parks [9]. People, including teenagers, desperately need city parks as an alternative for achieving aesthetics, recreation and relaxation, as indicated by the crowded visits of teenagers. This case study took Bungkul Park Surabaya because this city park has complete facilities as well as aesthetic recreational and relaxation values for teenagers. This park is one of the active city parks already well known by teenagers as citizens of Surabaya, East Java province, Indonesia. The park is visited by thousands of visitors in holidays which are dominated by teenagers.

The study was started by collecting the results of repeatedly pooling after distributing questionnaires to the teenage respondents to determine what factors become perception of teenagers in evaluating City Park aesthetics. The process was initiated by creating a pool by distributing questionnaires to 150 (one hundred and fifty) teenage respondents based on the level of education, ie. junior high school, senior high school, and university students with 50 questionnaires for each level of education, using selected variable match to evaluation perceptions of teenagers on City Park aesthetics (Table 2).

Table 2. Pooling of Assesment Factors of Teenager`s on the aesthetic of City Park, Perception based on the Level of Education.

No	Variable of Evaluation Perception of Teenagers on City Park Aesthetic	Level of Education			
		Junior High School	Senior High School	University	Total
1	Facility completeness of City park	10	8	9	27
2	Safety and comfort of visitors in City park	9	9	6	24
3	Arrangement/ diversity of vegetation in City park	14	15	15	44
4	Social interaction in City park	7	7	9	23
5	Cleanliness/health of City park	10	11	11	32
	TOTAL	50	50	50	150

Note: Selected respondents aged 15 to 20 years.

(Source: direct observation to Taman Bungkul Surabaya in October 2016)

In Table 2, it can be explained that the number of respondent of each variable: Arrangement/ diversity of vegetation in City park (number three) was a bit different from other variables in the amount of 44 or 29.33%. There were 14 junior high school respondents = 31.81%; 15 senior high school respondents = 34,095% and 15 university student respondents = 34,095% chose variable 3. While social interaction in City park (variable number four) was chosen by only 23 respondents= 15,33 %. Variable number four was selected by 7 junior high school respondents = 30.43%, 7 senior high school teenager respondents = 30.43%, and 9 university students respondent=

39.14%. This phenomenon showed that teenage respondents, based on the level of education from secondary school level to university level selected the variable number three (The arrangement of vegetation in City park) as a factor of perception in evaluating city park aesthetics.

The next process was to create a pooling by distributing questionnaires to 150 (one hundred and fifty) of the teenage respondents by gender with 75 (seventy-five) questionnaires for each gender, using the variables of evaluation perception of teenager on city park aesthetic (Table 3).

Table 3. Pooling of factors of evaluation perception of teenager on city parks aesthetic by sex

No	Variable of Evaluation Perception of Teenagers on City Park Aesthetic	Based on the Gender		
		Young men	Young Women	Total
1	Facility completeness of City park	15	16	31
2	Safety and comfort of visitors in City park	14	17	31
3	Arrangement/ diversity of vegetation in City park	18	17	35
4	Social interaction in City park	13	12	25
5	Cleanliness/health of City park	15	13	28
	TOTAL	75	75	150

Description: Selected respondents aged 15 to 20

(Source: direct observation to Taman Bungkul Surabaya in November 2016)

In Table 3, it can be explained that the selection of the five variables performed by young men and women was roughly equal and the figures were not highly different, even variable one and two had the same voters of 31 respondents = 20.66%. The largest number of respondents chose variable number three, the arrangement/diversity of vegetation in the City park, with 35 teenagers respondents = 23.33%, where there were 18 male respondents = 51.428% and 17 female respondents = 48.572%. For variable number four, social interaction in City park, was at the least selected by only 25 teenage respondents = 16.67% with 13 male respondents = 52% and 12 female respondents = 48%. Direct observation on Bungkul Park for four days proving that teenager respondents, both men and women, chose variable to control vegetation in City park (Number 3) as supporting factors of evaluation perception of teenager on city parks aesthetic.

The next step was to create pooling by distributing questionnaires to 150 (one hundred and fifty) teenager based on the age categorized as 15 years-16 years, 17 years-18 years and 19 years-20 years, with 50 (fifty) questionnaires for each age level, using the variable of evaluation perception of teenager on city parks aesthetic (Table 4).

Table 4. Pooling of Factors of Evaluation Perception of Teenagers on City Park Aesthetic based on the Age

No	Variable of Evaluation Perception of Teenagers on City Park Aesthetic	Based on the Age			Total
		15-16 years	17-18 years	19-20 years	
1	Facility completeness of City park	12	10	14	36
2	Safety and comfort of visitors in City park	9	11	10	30
3	Arrangement/ diversity of vegetation in City park	10	15	14	39
4	Social interaction in City park	8	6	7	21
5	Cleanliness/health of City park	11	8	5	24
	TOTAL	50	50	50	150

(Source: direct observation at Surabaya Bungkul Park in December 2016)

Table 4 showed the results of direct observation on Bungkul Park to 150 (one hundred and fifty) teenage respondents using five variables in line with the supporting factors of evaluation perception of teenager on city parks aesthetics. This table shows that variable number 3, number 1 and number 2 were ranked from the highest to the lowest although the difference was not significant, where variable 3 chosen by 39 respondents = 26%, 10 respondents aged 15 to 16 years = 25.64%, 15 respondents aged 17-18 years = 38.46% and 14 respondents aged 19-20 years = 35.9%. Variable 1 and 2 respectively selected by 36 = 24% and 30 = 20%. The lowest choice was on the social interaction in City park (variable number 4) which was selected by 21 teenage respondents = 14% with 8 respondents aged 15-16 years = 38.09%, six respondents aged 17-18 years = 28.57% and seven respondents aged 19-20 years = 33.34%. Research on Bungkul Parks held from September 2016 to December 2016 demonstrated that the teenager respondents aged 15 to 20 years chose variable arrangement/diversity of vegetation in City park as the highest factors of evaluation perception of teenager on city parks aesthetic.

After three times of pooling which involved 450 teenagers respondents to determine what factors influenced the teenager evaluation perception on aesthetic of city parks, the total of each variable was summarized (Table 5).

Table 5. Summary of Factors of Teenager Evaluation Perception on City Park Aesthetic based on the Level of Education, Gender, and Age

No	Variable of Evaluation Perception of Teenagers on City Park Aesthetic	Based on			
		Level of Education	Gender	Age	Total
1	Facility completeness of City park	27	31	36	94 (20,89%)
2	Safety and comfort of visitors in City park	24	31	30	85 (18,89%)
3	Arrangement/ diversity of vegetation in City park	44	35	39	118(26,22%)
4	Social interaction in City park	23	25	21	69 (15,33%)
5	Cleanliness/health of City park	32	28	24	84 (18,67%)
	TOTAL	150	150	150	450 (100%)

Based on the recapitulation of each variable, the supporting factors of evaluation perception of teenagers on City Park aesthetics can be seen from the first to the three rank, namely: 1. Arrangement/ Diversity of Vegetation in City park with 118 respondents = 26.22%, on the level of education = 44 respondents, the gender = 35 respondents and the age = 39 respondents. 2. Facilities completeness of City park with a total of 94 respondents = 20.89%, on the level of education = 27 respondents, gender = 31 respondents and age = 34 respondents. 3. Safety and comfort of visitors in Citypark with a total of 85 respondents = 18.89% with education level = 24 respondents, gender = 31 respondents and age = 30 respondents.

According to the recapitulation results, three factors become evaluation perception of teenagers on City Parks aesthetics were diversity and arrangement of vegetation in City park, completeness of facilities and safety and comfort of visitors in Bungkul Park, Surabaya. Based on the data from the Department of Cleaning and Park maintenance of Surabaya, the city park has more than a thousand species of plants which are replaced according to its function (Figure 04, a). This City Park also has a variety of facilities that can be used by young visitors, including Skate Park (Figure 04, b), live entertainment, skate arena, a lounge area to relax (Figure 04, c), children playground, food court, parking area etc. Safety and comfort of visitors are reasonably assured, which can be controlled by the freedom of the visitors who relax and mingle, and their facial expressions, as well as the recognition of the visitors in addition to the fact that the City Park was physically well monitored by security officers.



Figure 4. (a) Diversity and Arrangement of vegetation, (b)Skate park, Bungkul Park, Surabaya and (c)Safety and Comfort

(Source: Field Survey, Oktober 2016)

CONCLUSION

Based on research results and field observation on teenage respondents at different levels of education, gender and age, it can be concluded that the main factors in the evaluation perception of teenagers on city park aesthetic was the arrangement and diversity of the vegetation, especially the vegetation that serves as the ornamental vegetation and refreshing vegetation. Completeness of facilities owned by city park was also the factor in the perception of teenagers in evaluating the aesthetic of city park. Safety and comfort felt by teenage visitors of City Park was also one of the factors of teenager evaluation perception on the aesthetics of city parks.

The finding violated the general perception that the city parks were mostly considered as a place for social interaction. The finding showed that city park was the place to get the aesthetic of vegetation arrangement and diversity, a wide range of facilities, comfort and tranquillity for visitors, including the young visitors. City park with diverse vegetation also has a function to support the quality of the open urban space, such as the aesthetic quality, so that teenagers can get and give a positive attitude as a form of perception to the city park

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