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Users evaluation for public parks: influences of location, season, gender and age

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Abstract

The very rapid process of urbanization worldwide has increased research interest and the public awareness on the importance of public space. In this situation a better understanding of the importance of public participation in the process of planning, designing and management of green spaces is needed. To make this

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participation effective it should be supported by evidence based research. This study analyses the landscape characteristics and visitors evaluation in two urban parks of Milan, Italy and Tirana, Albania. Users' evaluations of landscape elements are examined during the warm season in Milan while in Tirana there are two sets of analyses; one during the warm season and one during the cold season. A total of 454 on-site self-report questionnaires were filled by park users, of which 153 in Milan (warm session) and 301 in Tirana (151 during warm session and 150 in during cold session). The aim of the study was to investigate the valuations of urban parks users and asses how season, gender and age impact park evaluation. Four components of users' evaluations are identified: (i) Evaluation of park qualities (ii) Park safety (iii) Evaluation of park structure and location, (iv) Traffic and Access to park and differences between location, season, gender and age were found.

Keywords: Public park; park qualities; park safety; users.

INTRODUCTION

The world's population living in urban areas is continuously increasing. According to the United Nations Department of Economic and Social Affairs, 55% of the world's population lives in urban areas, a proportion that is expected to increase to 68% by 2050 (United Nations Department of Economic and Social Affairs, 2018). These developments and the predictions of climate change impacts require innovative strategies for providing healthy and sustainable cities. Involvement of public is very crucial aiming to have effective strategies and to increase the general awareness for these developments. One of the concepts born in this framework is "Nature-based solutions (NBS)". The International Union for the Conservation of Nature (IUCN) defines NBS as actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity

benefits (Cohen-Shacham, E. et al. 2016). By reviewing existing literature on Nature Based Solution and health, Van den Bosch, M. and Sang, A. O. (2017) provide guidelines on how public health and well-being could be integrated into implementation of Nature Based Solution for resilient and liveable urban landscapes and health. They suggest that human health should be incorporated in the definition as a crucial vision and outcome of NBS implementation and conclude that it is important to use site adapted processes of co-designing, co-implementation, and co-management in relation to green spaces.

Developing green infrastructure (GI) in urban environments is one of key instruments of NBS in cities but there is some confusion about what is green space or green infrastructure. Taylora, L. and Hochuli, D. F. (2017) in a review of journal articles about green space found that less than half of the 125 journal articles reviewed defined what green space was in their study; although many articles implied a definition. They propose that researchers construct a definition of green space for the context of their research that utilizes both qualitative and quantitative aspects. However during the past four decades, research has been increasingly drawn toward understanding what is the link between the changing human–nature relationship and its impact on people's health. The findings assist urban managers, organizations, and communities in their efforts to increase new or preserve the existing green infrastructure. Trying to reach to a structured and common definition of GI, we distinguish the European Commission definition: *"GI is a network of multi-functional open and green space in and around towns and cities the gardens, trees, rivers, woodland, parkland, nature reserves and urban wild space, and the access to and through them, which support wildlife and biodiversity, provide recreation, access and leisure opportunities and create a sense of place"* (EC Environment, 2019).

Van den Bosch, M. A et al. (2016) developed and tested an urban green space indicator for public health, as proposed by the World Health Organization (WHO) Regional Office for Europe, in order to support health and environmental policies. They defined the indicator of green space accessibility as a proportion of an urban population living within a certain distance from a green space boundary. Based on reviewing the literature and the case studies, a 300 m maximum linear distance to the boundary of urban green spaces of a minimum size of 1 hectare are recommended as the default options for the indicator. Browning, M. and Kangjae, L. (2017) reviewed Web of Science articles that used geographic information system buffer analyses to identify trends between physical health, greenness, and distance within which greenness is measured. They found evidence that larger buffer sizes, up to 2000 m, better predicted physical health than smaller ones and recommended that future analyses use nested rather than overlapping buffers to evaluate to what extent greenness not immediately around a person's home (i.e., within 1000–2000m) predicts physical health. Jiang, B., et al. (2014) studied the dose–response curve of exposure to nearby nature. They found that there is a clear disparity between women and men. For women, no relationship between varying densities of tree cover and stress recovery was found. For men, the dose–response curve was an inverted-U shape. Zhang, L., et al. (2017) through a review of 70 studies published between 2001 and 2015 developed a framework concentrated on the concept of 'dose–response'. Dose refers to the exposure to certain urban green space provision, and response refers to health outcomes arising from the exposure. Houlden, V., et al., (2018) undertook a comprehensive data base search and thorough screening of articles which included a measure of green space and validated mental wellbeing tool, identified six ways in which green space was conceptualized and measured: (i) amount of local-area green space; (ii) green space type; (iii) visits to green space; (iv)

views of green space; (v) green space accessibility; and (vi) self-reported connection to nature.

Barbosa, O., et al. (2007) measured the distance along the transport network to public green space available to households in Sheffield, and compared this with the distribution of private garden space. They also examined how access to green space varies across different sectors of society and found that public green spaces are chronically underprovided relative to recommended targets and highlighted the need for additional green space. The review of Tillmann, S et al. (2018) focuses on how accessibility to, exposure to and engagement with nature affects the mental health of children and teenagers. Of the 35 papers included in the review, the majority focus on emotional well-being and attention deficit disorder/hyperactivity disorder. About half of all reported findings revealed statistically significant positive relationships between nature and mental health outcomes and almost half reported no statistical significance. Access to green space is increasingly recognized as an environmental justice issue (Ferguson, M. et al., 2018; Browning, M., and Rigolon, A. 2018; Dadvand, P., and Nieuwenhuijsen, M. 2019). Urban planners, designers, and ecologists, therefore, need to focus on urban green space strategies that are 'just green enough' and that explicitly protect social as well as ecological sustainability. (Wolch, J. R., et al. 2014; Van den Bosch, et al., 2016).

During last decades a lot of evidence is collected on the beneficial effects of urban green spaces, such as improved mental health, reduced cardiovascular morbidity and mortality, obesity and risk of type 2 diabetes and improved pregnancy outcomes. Mechanisms leading to these health benefits include psychological relaxation and stress alleviation, increased physical activity, reduced exposure to air pollutants, noise and excess heat (Bixby H., et al., 2015; Anguluri, R. and Narayanan, P. 2017; Browning, M. and Kangjae, L. 2017; Coppel, G., and Wüstemann, H. 2017; Loureiro, A., Veloso. S.,

2017; Markevych, I. et al., 2017; Astell-Burta, T., et al., 2018; Hofmann, M. et al., 2018). Suppakittpaisarn et al. (2017) identified 55 peer-reviewed articles addressing the relationships between GI and human health. Familiar types of GI, such as trees and green spaces, were found to be beneficial to the body (cardiovascular system, cortisol regulation, and pregnancy health), mind (attention capacity and mental health), and behaviour (lower crime, better self-regulation, and more pro-social behaviours). They found much less research exploring the impacts of Green Stormwater Infrastructure on health. Oh, B. et al. (2017) evaluated the physical and psychological benefits of a specific type of exposure to nature, forest therapy. The conclusion was that forest therapy may play an important role in health promotion and disease prevention. Vanaken, J., and Danckaerts, M. (2018) published a systematic review aiming to provide an overview of observational studies assessing the association between empirical green space exposure with standardized outcome measures of mental health problems, mental well-being and developmental problems in children, adolescents and young adults. Their evidence consistently suggests a beneficial association between green space exposure and children's emotional and behavioural difficulties, particularly with hyperactivity and inattention problems.

During last decade research is dealing with demand or social factors such as user needs, preferences and values. Hegetschweiler, K. T., et al., (2017) provide an overview of this highly interdisciplinary research, to identify which factors significantly influence dependent variables such as levels of use, activities or health and well-being benefits. According to them commonly used methods were the combination of questionnaires with any on-site visual recording of elements or GIS data. Most of the studies on the associations between health and green space are based on neighbourhood and park level and some researchers have found that the local health

effects of urban green space do not transfer to the city level. They suggest that further work is needed to establish how urban residents interact with local green space, in order to establish the most relevant measures of green space (Houlden, V., et al. 2018; Kondo, M. C., et al., 2018)

The above mentioned facts underline the need for interdisciplinary cooperation, bringing some disciplines like landscape architecture and urban planning close to psychology and health sciences. Landscape architecture commemorates this year the 100 anniversary of the first graduate study in Europe (Teqja, Z., and Dennis, S., 2016a). In the course of one century this discipline has changed dramatically. According to John Morloch before 1960s, landscape architecture had two major foundations: art/aesthetic and the technology. By the 1960s, landscape design pioneers, including Ian L. McHarg and Phil Lewis, had introduced natural systems as a third foundation. Global society's responsibility to manage the earth as a resource also increased. In the 1980s and 1990s, it was realized that unsustainable decisions did not happen primarily to lack of knowledge of how world works as physical and ecological systems, but due to the manner and paradigm through which we make decisions. So, according to Motloch there is a present and profound need to develop a fourth design foundation: a human-systems foundation for design. An understanding of human sciences needs to be integrated into planning and design processes of parks and green infrastructure (Motloch, J. 2001; Teqja, Z., and Dennis, S., 2016b).

These developments in east European countries like Albania where evident just after the collapse of Berlin wall. Albania used to be a predominantly rural country until few decades ago. Very rapid demographic changes and the unplanned process of urbanization have impacted the urban lifestyle but also have damaged the urban green spaces and have increased the public awareness on the importance of

public space (Teqja, Z and Kopali, A. 2012a). Meanwhile the population and decision makers better understand the importance of public participation in the process of planning, designing and management of green spaces (Alves, S., et al 2008; Demir, Z., 2010; Muderrisoglu, H., et al., 2010; Teqja, Z., and Kopali, A. 2012b; Dennis, M., and James P. 2016; Paul, S., and Nagendra, H. 2017). To make this participation effective it should be supported by evidence based research.

Material and method

Two different locations were chosen for this study: Tirana, the capital city of Albania and Milan, Italy. In both cities two urban parks were selected, the artificial lake Park in Tirana and Parco Don Giussani ex Parco Solari in Milan. The method used was on-side interview filled by users, visitors of parks. The questionnaires were conducted during July - September 2017 in Milan, and in two different seasons in Tirana: cold season (December 2017 - January 2018) and warm season (June – July 2018). Questionnaires were carried out in weekdays and in weekend at different time of day, not on rainy or very windy days. The whole questionnaire took around 20 min to complete. The number of completed questionnaires at each park is 153 in Milan and 301 in Tirana (151 for the warm season and 150 for the cold season). The questionnaire was structured according of three overall themes: (1) time of coming and spend in urban park, motives of visits, what users appreciate in park, what is missing, (2) safe and security of park, (3) demographics. This paper is focused on users' appreciations for (i) park qualities like presence of greenness, colours, aroma and comfort of benches; (ii) users' appreciations for park structures like presence of fencing, presence of dog area and park location; (iii) users' evaluation for park safety and (iv) users' evaluation for park access (how easy or difficult is to approach the park). Likert scale from (1 – not at all to 5 – very much) was used to evaluate users opinions. Reliability and exploratory analysis,

ANOVA and Test of Homogeneity of Variances analysis were accomplished through SPSS 23 package. Kaiser-Meyer-Olkin (KMO) Test is used for Sampling Adequacy.

Results and their discussion

A reliability and exploratory analysis is conducted with the data collected. As a result four components of users' evaluations are identified:

(i) Evaluation of park qualities composed by user' ratings on the following: Presence of greenness, Level of Cleanliness, Colors, Fragrances, the Comfort of the benches.

(ii) Park safety, composed by users' ratings on the following items: In general, this park is safe (without violence, harassment, aggression, etc.); I feel confident when I stand alone in the park during the day; I feel confident when I stand alone in the park when it is dark.

(iii) Evaluation of park structure and location, composed by users' ratings on the following items: The presence of dog areas, Fences (if present); It's the closest park to the house.

(iv) Traffic and Access to park, composed by users' ratings on the following items: Access to the Park is dangerous due to the traffic around; Close to the park it is a bit dangerous because of the surrounding road traffic.

These components compose the structure of users' evaluations on park and are used to find differences between locations and seasons, and also to identify gender and age differences.

The results of reliability and exploratory analysis are shown in table 1. The four components explain 63% of the total Variance. This table shows two tests that indicate the suitability of our data for structure detection. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that

indicates the proportion of variance in our variables that might be caused by underlying factors. High values (close to 1.0) generally indicate that a factor analysis may be useful for the data. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. Bartlett's test of sphericity tests the hypothesis that our correlation matrix is an identity matrix, which would indicate that the variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with the data (El-Ansary, A. I., and Stern, L. W. 1972; Xhoxhi, O. et al., 2014. In our case KMO (.789) and Bartlett's Test of Sphericity (p<.05.), provide evidence of the appropriateness of factor analysis.

Table 1. Reliability and Exploratory analysis

Components	α	C1	C2	C3	C4
(C1) Evaluation of park qualities	**0.824**				
Presence of greenness,		0.800			
Level of Cleanliness		0.768			
Colors		0.768			
Fragrances		0.747			
The Comfort of the benches		0.685			
(C2) Safety in the park	**0.733**				
In general, this park is safe			0.808		
I feel confident when I stand alone in the park during the day			0.792		
I feel confident when I stand alone in the park when it is dark			0.783		
(C3) Evaluation of park structure and location	**0.670**				
The presence of dog areas				0.79	
Fences (if present);				0.748	
It's the closest park to the house				0.555	
(C4) Traffic and Access to park	**0.645**				
Access to the Park is dangerous due to the traffic arou					0.86
Close to park it is a bit dangerous bc of the surroundin					0.85

Note: Extraction method: Principal Component Analysis. Rotation method: Varimax with Kaiser Normalization.

As it can be seen from Table 1, Chronbach's **α** of two first components is above the minimum accepted level of .70. But all factor loadings are well in excess of Stevens (2002)

recommended value of .40, providing evidence of constructs convergent validity.

Table 2 shows descriptive analysis of our variables (components). After accomplishing the Test of Homogeneity of Variances (Table 3) it was evident that, except component three, the variances were different. This means that the F value of ANOVA (Table 4) is biased. This is why Robust Tests of Equality of Means was performed and it is shown in Table 5.

Table 2. Discriptive analyses of studed groups

Variables	Groups	N	Mean	Std. Deviati	Std. Error
Evaluation of park qualities	**Tirane Cold seas**	150	0.1401	0.9767	0.0797
	Tirane Warm sea	151	0.4980	0.8630	0.0702
	Milan	153	-0.6288	0.8040	0.0650
Safety in the park	**Tirane Cold seas**	150	-0.2133	0.8944	0.0730
	Tirane Warm sea	151	-0.2696	1.0857	0.0884
	Milan	153	0.4752	0.8298	0.0671
Evaluation of park structure	**Tirane Cold seas**	150	-0.2880	0.9370	0.0765
	Tirane Warm sea	151	-0.0490	1.0318	0.0840
	Milan	153	0.3306	0.9353	0.0756
Traffic and Access to park	**Tirane Cold seas**	150	0.0374	1.0558	0.0862
	Tirane Warm sea	151	-0.0098	1.0511	0.0855
	Milan	153	-0.0270	0.8917	0.0721

Table 3 Test of Homogeneity of Variances

Variables		Levene Statistics	df1	df2	Sig.
Evaluation of park qualities	Based on Mean	3.632	2	451.00	0.03
	Based on Median	3.586	2	451.00	0.03
	Based on Median and with adjusted df	3.586	2	444.99	0.03
	Based on trimmed mean	3.616	2	451.00	0.03
Safety in the park	Based on Mean	8.045	2	451.00	0.00
	Based on Median	7.987	2	451.00	0.00
	Based on Median and with adjusted df	7.987	2	441.11	0.00
	Based on trimmed mean	7.978	2	451.00	0.00
Evaluation of park structure and location	Based on Mean	0.391	2	451.00	0.68
	Based on Median	0.403	2	451.00	0.67
	Based on Median and with adjusted df	0.403	2	442.65	0.67
	Based on trimmed mean	0.382	2	451.00	0.68
Traffic and Access to park	Based on Mean	3.936	2	451.00	0.02
	Based on Median	3.143	2	451.00	0.04
	Based on Median and with adjusted df	3.143	2	440.53	0.04
	Based on trimmed mean	3.725	2	451.00	0.03

The impact of location and season on users' evaluations for public parks

First step of this analysis was to compare the two different parks for our four variables (i) Evaluation of park qualities, (ii) Park safety, (iii) Evaluation of park structure and location (iv)Traffic and Access to park. Then Tirana Park is analysed in if there are differences in worm and cold season. Table 4 shows the ANOVA analysis.

Table 4. ANOVA analysis

Variables		Sum of Squares	df	Mean Square	F	Sig.
Evaluation of park qualities	Between Groups	100.887	2	50.443	64.61	0.000
	Within Groups	352.113	451	0.781		
	Total	453	453			
Safety in the park	Between Groups	52.342	2	26.171	29.459	0.000
	Within Groups	400.658	451	0.888		
	Total	453	453			
Evaluation of park structure and location	Between Groups	29.526	2	14.763	15.722	0.000
	Within Groups	423.474	451	0.939		
	Total	453	453			
Traffic and Access to park	Between Groups	0.336	2	0.168	0.168	0.846
	Within Groups	452.664	451	1.004		
	Total	453	453			

Table 5. Robust Tests of Equality of Means

Variables		Statistics	df1	df2	Sig.
Evaluation of park qualities	Welch	72.755	2	298.260	0.000
	Brown-Forsythe	64.488	2	437.496	0.000
Safety in the park	Welch	33.034	2	296.888	0.000
	Brown-Forsythe	29.425	2	426.306	0.000
Evaluation of park structure	Welch	16.774	2	299.964	0.000
	Brown-Forsythe	15.719	2	446.727	0.000
Traffic and Access to park	Welch	0.168	2	298.012	0.845
	Brown-Forsythe	0.167	2	439.928	0.846

a. Asymptotically F distributed.

ANOVA analysis confirms that there are differences among different locations and different seasons. However, ANOVA cannot provide detailed information on differences among the various study groups, or on complex combinations of study

groups. Aiming to find where these differences are significant, the analysis of Multiple Comparisons (Table 6) was performed. To do this, Post-Hoc Test Bonferroni was used to make comparisons. As it can be seen from Table 6, all three groups are different for variable (i) Evaluation of park qualities. It is normally expected that parks in two different locations like Milan and Tirana have differences in park qualities. Interesting is the fact that evaluation of park qualities of Tirana park change from warm to cold season. The results show the highest ratings for Tirana Park during warm season and the lowest ratings for Milan Park.

Variable (ii), Safety in the park is without significant differences for Tirana Park in both seasons but safety seems to be higher in Milan Park compared to Tirana Park.

A similar situation is for variable (iii) Evaluation of Park Structures: there are differences between Tirana and Milan but there are no significant differences between the two seasons in Tirana. This is expected also because park structures remain almost the same in the course of different seasons. Milan Park structures seem to be more appreciated by its users. As it evident from ANOVA analysis we could not find any significant differences among our groups regarding traffic and access to parks.

Tabele 6 Multiple Comparisons

Variables	(I) country	(J) country	Mean Difference	Std. Error	Sig.
Evaluation of park qualities	Tirane cold season	Tirane warm season	-.35788849*	0.10186	0.001
		Milan	.76890523*	0.10153	0.000
	Tirane warm season	Tirane cold season	.35788849*	0.10186	0.001
		Milan	1.12679371*	0.10136	0.000
	Milan	Tirane cold season	-.76890523*	0.10153	0.000
		Tirane warm season	-1.12679371*	0.10136	0.000
Safety in the park	Tirane cold season	Tirane warm season	0.05635517	0.10865	1.000
		Milan	-.68841740*	0.10830	0.000
	Tirane warm season	Tirane cold season	-0.05635517	0.10865	1.000
		Milan	-.74477256*	0.10812	0.000
	Milan	Tirane cold season	.68841740*	0.10830	0.000
		Tirane warm season	.74477256*	0.10812	0.000
Evaluation of park structure and location	Tirane cold season	Tirane warm season	-0.23898318	0.11171	0.099
		Milan	-.61859077*	0.11134	0.000
	Tirane warm season	Tirane cold season	0.23898318	0.11171	0.099
		Milan	-.37960759*	0.11115	0.002
	Milan	Tirane cold season	.61859077*	0.11134	0.000
		Tirane warm season	.37960759*	0.11115	0.002
Traffic and Access to park	Tirane cold season	Tirane warm season	0.04727092	0.11549	1.000
		Milan	0.06443347	0.11511	1.000
	Tirane warm season	Tirane cold season	-0.04727092	0.11549	1.000
		Milan	0.01716255	0.11492	1.000
	Milan	Tirane cold season	-0.06443347	0.11511	1.000
		Tirane warm season	-0.01716255	0.11492	1.000

The impact of gender and age on users' evaluations for public parks

Next step was to see if there are differences of four variables (i) Evaluation of park qualities, (ii) Park safety, (iii) Evaluation of park structure and location (iv)Traffic and Access to park. For this purpose the Independent sample test is used. The Independent Samples t Test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different.

Table 7 shows the Independent Sample Test for gender differences. As it can be seen there are differences between men and women regarding the safety in the park and traffic and access to park. It means that women in general are more concerned to safety, traffic and easy access to public parks.

To find the impact of age 6 age groups are analysed: 18-20; 20-30; 30-40; 40-50; 50-60 and above 60 years old. Table 8 shows the results of ANOVA analysis for age groups.

Table 7 Independent sample test

Variables	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig.	t	df	Sig. (2-tailed)	Std. Error
Evaluation of park qualities	Equal variances assumed	0.837	0.361	-0.311	451.000	-0.029804
	Equal variances not assumed			-0.308	381.731	-0.029804
Safety in the park	Equal variances assumed	0.003	0.960	3.492	451.000	0.330077
	Equal variances not assumed			3.482	391.641	0.330077
Evaluation of park structure	Equal variances assumed	0.987	0.321	-1.031	451.000	-0.098605
	Equal variances not assumed			-1.044	411.984	-0.098605
Traffic and Access to park	Equal variances assumed	0.003	0.956	0.272	451.000	0.026068
	Equal variances not assumed			0.272	396.136	0.026068

The following table shows the results of ANOVA analysis for the impact of age groups regarding the four variables created in this study. As it can be seen from this table for 6 age groups analysed there are significant differences regarding Evaluation of park qualities and Safety in the park.

Table 8. ANOVA analysis for age impact

Variables		Sum of Squares	df	Mean Square	F	Sig.
Evaluation of park qualities	Between Groups	18.742	5	3.748	3.867	0.002
	Within Groups	434.258	448	0.969		
	Total	453.000	453			
Safety in the park	Between Groups	21.444	5	4.289	4.452	0.001
	Within Groups	431.556	448	0.963		
	Total	453.000	453			
Evaluation of park structure and	Between Groups	4.779	5	0.956	0.955	0.445
	Within Groups	448.221	448	1.000		
	Total	453.000	453			
Traffic and Access to park	Between Groups	4.549	5	0.910	0.909	0.475
	Within Groups	448.451	448	1.001		
	Total	453.000	453			

After accomplishing the analysis of Multiple Comparisons we could identify the specific differences. So regarding variable (i) Evaluation of park qualities the differences are between group 1 (18-20 years old); group 2 (21-30 years old); group 3 (31-40

years old) with group 6 (above 60 years old). So young people from 18-40 years old have different preferences for park qualities compared to old people (above 60 years old). In general old people are more satisfied with the situation regarding park qualities.

The differences regarding the safety in the park are identified among young people. So it results that the most active strata of the users (age 21-40) are more concerned regarding park safety compared to young users (age 18-20).

CONCLUSIONS

In this study four important component of park users evaluations are identified: (i) Evaluation of park qualities (ii) Park safety (iii) Evaluation of park structure and location, (iv) Traffic and Access to. ANOVA analysis confirmed that there are differences in users' evaluations among different locations and different seasons. All three groups analysed: Tirana during warm season; Tirana in cold season and Milan in warm season resulted to be different for the Evaluation of park qualities. The results show the highest ratings for Tirana Park during warm season and the lowest ratings for Milan Park. Safety seems to be higher in Milan Park compared to Tirana Park. There are differences between men and women regarding the safety in the park and traffic and access to park. It means that women in general are more concerned to safety, traffic and easy access to public parks. In general old people are more satisfied with the situation regarding park qualities while the most active strata of the users (age 21-40) are more concerned regarding park safety compared to young users (age 18-20). The findings of this study could be used in the process of planning, designing and management of public parks and other green spaces.

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