USES AND PERCEIVED BENEFITS OF GREEN SPACES IN BUENOS AIRES
USOS Y BENEFICIOS PERCIBIDOS EN ESPACIOS VERDES EN BUENOS AIRES

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Abstract

Urban green spaces provide a full range of community benefits (physical, environmental, psychological and social) but some parks types appear differentially important in providing certain benefit types. In this study we analyzed quality and perception of two parks and two plazas in Caballito and Flores neighbourhood (Buenos Aires city). We used the green flag index for green spaces´ quality and interviews (n:232) to explore people`s perception asking 10 questions, four referred to public spaces in general and six referred to the selected green spaces in both neighbourhoods. Results showed that parks and plazas are valued spaces, different visited by residents or by people coming elsewhere attracted by high-quality green spaces. Our findings showed that size and the offer of activities/infrastructure play a role in how a green space is used and how different benefits are recognised and perceived.

Keywords: Parks, plazas, quality, benefits

Resumen

Los espacios verdes urbanos proveen de un amplio rango de beneficios (físicos, ambientales, sicológicos y sociales) pero algunos tipos de parques son aparentemente más importantes en la provisión de ciertos beneficios. En este estudio se analizó la calidad y la percepción en dos parques y dos plazas de los barrios de Caballito y Flores en la ciudad de Buenos Aires. Se aplicó el índice de Bandera Verde para estimar la calidad y encuestas (n:232) para explorar la percepción de los usuarios por medio de

10 preguntas. Cuatro de ellas indagaban sobre el espacio público en general, seis sobre los espacios verdes seleccionados en particular. Los resultados indican que las áreas verdes son sitios valorizados, utilizados de diferente manera por los residentes o gente proveniente de otros lugares, atraída por la calidad de los espacios. Se observó que el tamaño y la oferta de actividades/infraestructura jugaba un rol importante en cómo se usa y en cuáles beneficios se reconocen y perciben.

Palabras claves: Parques, plazas, calidad, beneficios

Introduction

Latin-America is the most urbanized region of the world. More than 80 % of the population in Latin America lives in cities, and by 2050 the number is expected to reach 90 % (ONU-HABITAT 2012). The majority of the planning systems in this region has been inherited from the previous colonial time or adopted from Northern contexts (Watson 2008). The resulted design with uneven service provision has often been retained (Buchler 2003) and coupled with rapid urbanization, which has led to the fragmentation of public spaces. Carr et al. (1992) defined public space as " open, publicly accessible places" that facilitate the popular activities necessary for community building. Public space – streets, squares, plazas and parks- are under immense pressure and are often inadequate, a reason why city councils in these times are concerned to create inclusive, healthy and functional public spaces.

One of the most conspicuous characteristics of Latin America cities exhibit great social and economic differences (ONU-HABITAT 2012). The structures of inequity go beyond differences in income and housing standards, to also include an uneven distribution of green space availability and quality (Pauchard and Barbosa 2013).

Parks have been significant sources of open space in urban history, ranging from private, even sacred spaces to fully public spaces serving as central points of social interaction and recreation (Stanley et al. 2012). On any day or weekend many thousands of people spend several hours outdoors in their local park simply living their lives. As well as the explicit 'reasons' why people visit parks (take children, walk, play, or practice some sport), they are also places for solitude, places to think or talk things out, or where people go just to change the pace of life and relax (Greenhalgh and Parsons 2004).

Public green spaces (GS) across Latin America (LA) have traditionally been favourite meeting places for people from all walks of life and all ages, as places associated with air, light and nature, as well as culture and multiculturalism. Today, more than ever before and in common with the

rest of the world, they cater to a wide range of needs and provide society with social, environmental and economic benefits (Faggi et al 2015).

In Buenos Aires, as in many cities around the world, parks and plazas have been designed as sites of aesthetic reflection or for specific social practices following a "top-down" planning (Stanley et al. 2012). While parks while are large and contain a multifaceted green infrastructure, plazas are open space framed by buildings on most sides and usually hard surfaced. Both can host a diversity of civic activities and tend to be multi-purpose (Stanley et al. 2012). In Buenos Aires, by the late nineteenth century, green spaces began to be relevant urban areas in social life. Large public parks arose under the influence of French and English landscaping models coinciding with the hygienist movement in its attempts to relieve the burden of urban living. These transformations in the urban matrix produced large changes in Latin American cities that gradually departed from their colonial past, with tiny dry plazas between blocks, to striking landscaped big parks playing a central role as places for social integration (Faggi and Ignatieva, 2009).

This study explored the benefits perception in green spaces in two representative neighbourhoods of Buenos Aires city. Our aim was to explore how green spaces users in the Caballito and Flores neighbourhoods perceived their present condition and envisaged the potential improvement.

In particular, the authors wanted to examine (1) which benefits were provided by parks and plazas, and (2) if the uses were influenced by the size of the green spaces and the place of residence of the users.

This research constitutes a step forward in the better understanding of public perceptions of green spaces to provide useful information for advice as to whether there is sufficient choice and mix of provision to satisfy the target users.

Methodology

Study area

Caballito and Flores are middle class densely populated neighbourhoods, centrally located in the federal city (Table 1). Parts of the neighbourhoods are quiet, leafy residential areas, while others are bustling commercial hubs. Both neighbourhoods are crisscrossed by avenues and a railway. In Caballito there are three major public parks and five small plazas; in Flores there are only nine plazas. In both cases fragmentation disconnect these public spaces, which results in the isolation of the available tracts of green space.

Table 1 Characteristics of Caballito and Flores Neighbourhoods and the studied green spaces

Neighbourhood	Caballito	Flores
size	6.8 km^2	7.8 km^2
population	170.309	142.695
density	25.045	18.294
Nr. Parks	3	0
Nr. Plazas	5	9
Studied area	Parks	Plazas
Area	Centenario: 12 ha	Pueyrredón (1ha)
	Rivadavia: 6 ha	Misericordia (1ha)
Green Flag Value	Average score: Centenario Park: 7 (good) Rivadavia Park: 6.3 (fair)	Pueyrredón: 5.6 (fair) Misericordia: 3.3 (poor)

Data collection and analyse

This exploratory study was conducted during 2013 and 2014 in two parks: Centenario and Rivadavia, in Caballito and two plazas: Pueyrredón, Misericordia in Flores. (fig.1)

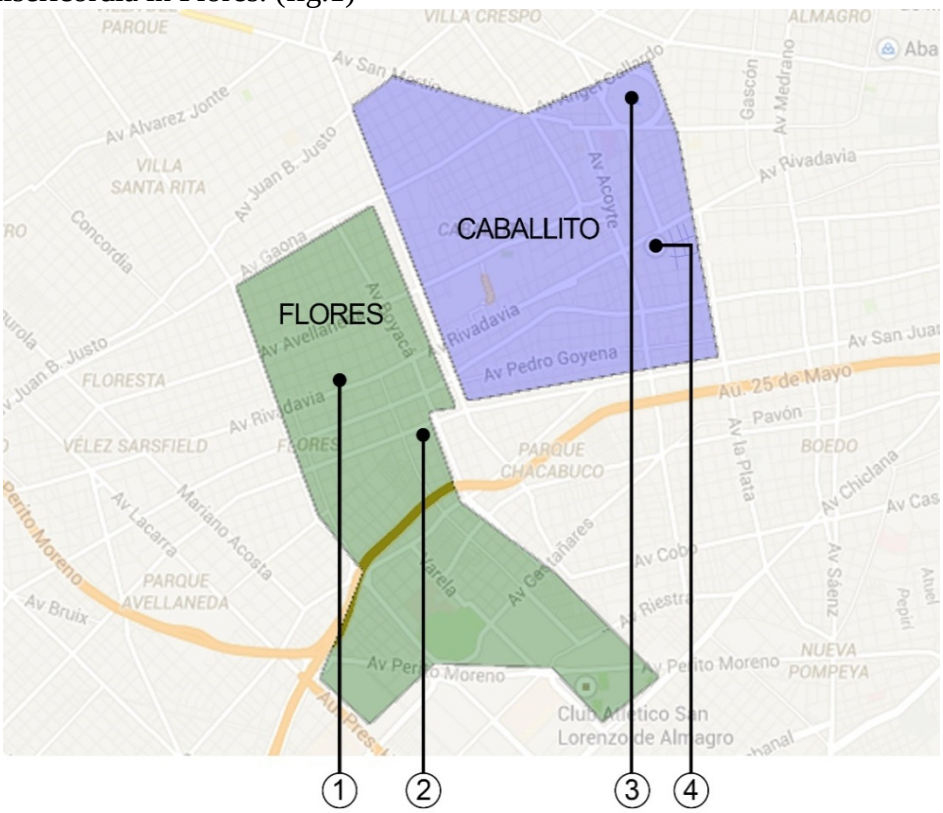


Fig.1. plazas: (1) Pueyrredón, (2) Misericordia in Flores; parks: (3) Centenario and (4) Rivadavia, in Caballito

Plazas in Flores are neighbourhood green spaces as they are smaller areas (1 ha) which tend to serve only local residents. Parks in Caballito are larger areas, between 2 and more hectares which people travel to visit (district green spaces) attracted by their scenic qualities and activities taking place.

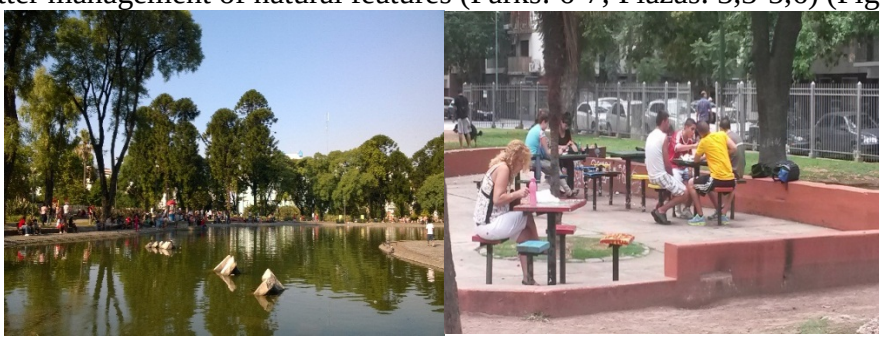
Quality of the green spaces was estimated by using the Green Flag Index (Greenhalgh and Parsons 2004). This Green Flag Value is a measure of quality relating to the management, operation and improvement. It incorporates what is currently considered good practice over the range of the eight main criteria against which every green space will be judged.

These criteria which are valued along a scale out of 10 are: 1) A welcoming place, 2) Healthy, safe and secure, 3) Well maintained and clean, 4) Sustainable, 5) Conservation and heritage, 6) Community involvement, 7) Marketing. The scoring line is as follows: 0-1 very poor; 2-4: poor; 5-6: fair; 7: good, 8: very good, 9: excellent, 10: exceptional. In our study we estimated the average score.

To explore people`s perception in total 232 surveys were randomly administered by intercepting people randomly in the green spaces, and asking them to take part in the survey. Face to face interviews by means of questionnaires were carried out over a three month period from the end of summer through autumn in two parks in Caballito (n: 100) and two plazas (n: 132) in Flores neighbourhood. Interviews were conducted on both weekdays and weekends between during the day. The data they provided was collected and analysed regardless of they lived in the case study area or not. Respondents were asked 10 questions, four referred to public spaces in general and six referred to the selected green spaces in Caballito and Flores. In addition, basic socio-demographic data was collected (age, gender, working status, place of residence).

Results

As the Green Flag values showed parks in Caballito had a better infrastructure than the plazas. Facilities were well maintained and there was a better management of natural features (Parks: 6-7; Plazas: 3,3-5,6) (Fig 2.)



(Fig.2 – Park Centenario; Plaza Misericordia; Plaza Pueyrredón; Park Rivadavia)

The respondents were nearly evenly divided, while females making up 55% and males the remaining 45%. In Caballito, those aged 26-35 years made the largest group of all respondents, unlike in Flores plazas' visitors were evenly distributed (16- 25 years:19%, 26-35 years: 24%, 36-50 years:17 %, 51-60 years:19.7% , 51-60 years: 17%). Of the respondents interviewed in Caballito only 20% live in the case study neighbourhood, while in Flores local residents account to 71% of respondents.

Of those interviewed, the majority (Caballito:70%, Flores 85%) have outdoor space in their homes. Balconies made up the largest proportion of domestic outdoor spaces (38%) in Caballito followed by patios (32%). In Flores patios were more important (29%) followed by balconies (25%) and terraces (16%). Roughly half (54%) in Caballito and 34% in Flores used daily the outdoor space in their homes.

Interestingly, the majority (58%) of respondents believed there are enough neighbourhood green spaces in Caballito, demonstrating ignorance of what happens there. On the contrary in Flores 66% considered that green spaces are insufficient.

When asked about the benefits of green spaces in general (Fig. 3), most respondents in Caballito opted for social interaction (39%), followed by physical activity (32%) In Flores psychological benefits (36.5%) scored first, followed by social interaction (31.7%). Strikingly in Flores, 10 % of the people believed green spaces offer no benefits; 77% of them were men and almost the half young (16-25 years).

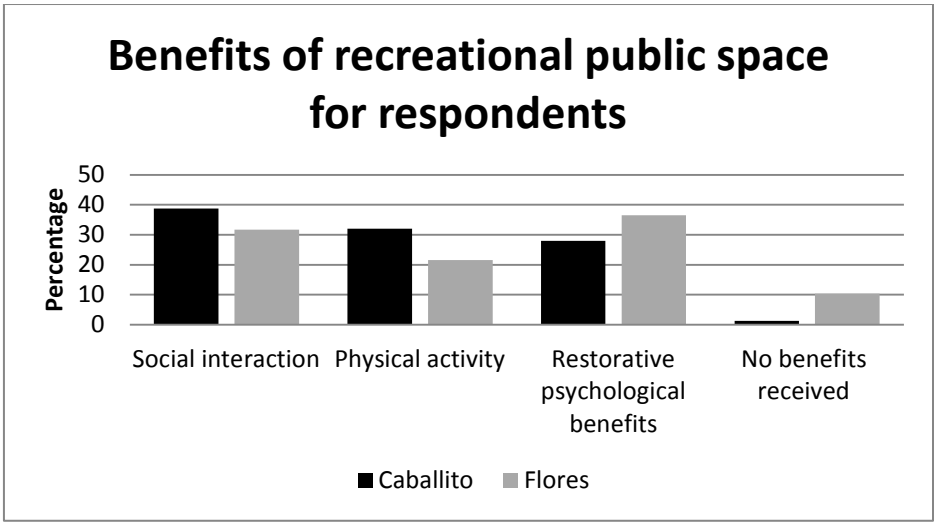


Fig. 3. Benefits of recreational public space for respondents interviewed in Caballito and Flores neighbourhood

Respondents' top three uses of public green spaces (Fig.4) confirmed their answers to questions on important elements in parks and plazas and the benefits perceived. As Fig 3. shows in Caballito there are some significant differences in preferred uses of the compared neighbourhoods. Parks in Caballito are preferred for the practice of sports (run, yoga, aerobics, ride a bike) and recreational activities, while plazas in Flores are devoted to relaxation, to walk or stroll and for other psychological benefits. We found no differences between parks and plazas by benefits like social interaction or to breath frish air.

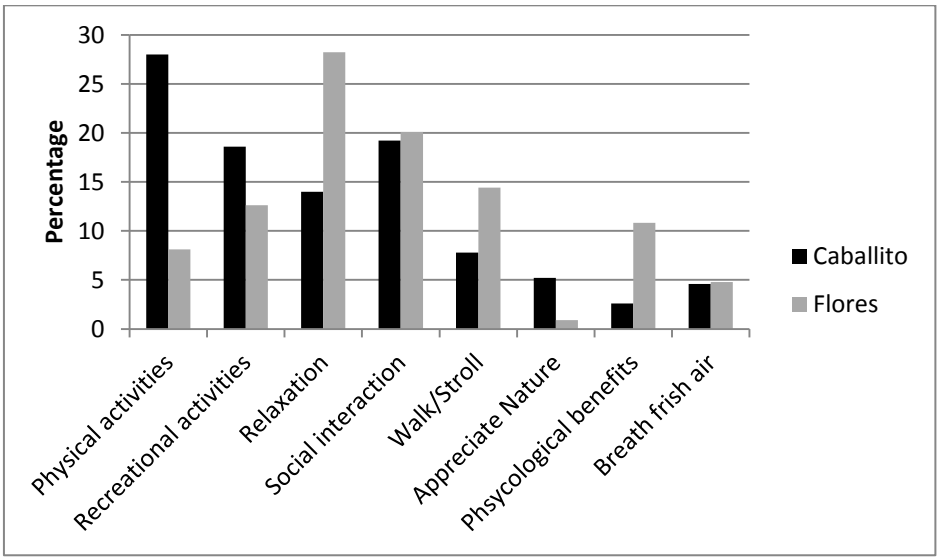


Fig 4. Respondents ' top three uses of public green space in Caballito and Flores neighbourhoods

Antisocial behaviour like broken glass, vandalism leads (P:56%, PZ:65%) as one of the threats and weakness respondents considered to be the major in parks (P) and plazas (PZ), together with incivilities (dog mess, drug/alcohol abuse) (P:51%, PZ:67%) lack of amenities (P:42%, PZ:26%), poor maintenance (P:40%, PZ:45%) and a lack of recreational facilities (P:27%, PZ:23%).

Discussion

Results showed that parks and plazas are valued spaces, although many of the respondents have the possibility to use daily the outdoor space in their homes. What is it that makes someone feel attracted to a park or a plaza? As stated by Greenhalgh and Parsons (2004) people have many reasons for visiting them. Parents want somewhere to take children to play in spaces closed to their homes (plazas) or to those parks more distant but well equipped with games infrastructure. As the results showed, in the Caballito parks, the majority of those using green areas are not being residents within the neighbourhood itself, but people coming elsewhere attracted by high-quality and safe green spaces. The prominence of outsiders was also confirmed by interviewed locals, who generally expressed a dislike of the influx of those from further afield, also associated with antisocial behaviour and incivilities. Caballito neighbours complained that the many activities, which are taking place attempt against the calmness wished by them especially in the weekends.

In Buenos Aires for the last 10 years, municipal authorities have set up a green spaces revitalization programme and established a multi-faceted strategy to make the green spaces more attractive. These actions aim at guaranteeing good, easily accessible places for social interaction, for walk or sports, or simply to come close to nature. They also intend to promote a healthier life through the practice of sport and the prevention of illnesses. Outdoor gyms free to use have been set up in several parks in order to increase the number of people getting physically active. They contain high quality fitness equipment suitable for people of all ages. In addition, professional instructors give a wide range of aerobic, yoga classes and different recreational activities (Faggi et al. 2015). These new activities were added to the traditional existing ones such as street markets, music and various shows.

As stated by Brown et al. (2014) urban green spaces provide a full range of community benefits (physical, environmental, psychological and social) but some parks types appear differentially important in providing certain benefit types. To meet friends, experience an organized and entertaining scene or to get out of the house to breath fresh air did not seem to be linked to the size of the green spaces, as these services were same

mentioned for parks and plazas. On the contrary, physical and recreational activities which are place demanding, can best be set up in larger parks, as our findings showed (Physical activities in parks: 28 %, in Plazas: 8 %).

To appreciate Nature could also be linked to larger sizes. In some countries people may want to enjoy plants, flowers, trees and much is invested by the city council to satisfy these demands. Our results showed that in both cases, green infrastructure was not so much mentioned in the interviews. It seems that in Buenos Aires green spaces are more perceived for recreational and social services than as places to conserve or appreciate biodiversity. However, we believe that "appreciating Nature" was masked in the concept of "relaxation", which occupied an important place in the scale of benefits. Recent studies (Hartig and Staats 2006, Van den Berg et al. 2007) have shown that to "see green" can reduce domestic violence, quicken healing times, reduce stress, bringing psychological benefits in individuals (Ulrich 1984, Kaplan and Kaplan 1989). As stated by Tidball (2012) "seeing green" (plant- people –interactions) implications for human health and well-being appear to be well documented.

Regarding size, on the contrary to parks, plazas were mentioned as ideal places somewhere to go for a relaxing walk, to read and rest (psychological benefits). This is in coincidence with Nordh and Østby (2013), who found that in Oslo small parks best fit for relax and philosophize, to read, or eat/drink. This statement can be related with the fact that plazas are calmer places best to experience an undisturbed peacefulness, to be on one' own, as there do not exist the multiple activities that are frequently offered in the parks especially at weekends.

Conclusion

Our findings showed that size and the offer of activities/infrastructure play a role in how a green space is used and how different benefits are recognised and perceived.

As around the world there are now many different pressures and conflicting demands on parks and green spaces from environmental demands to sports, leisure and general recreational uses. Similarly, it is common to find a wide range of interdisciplinary work which include interdisciplinary professional expertise, from landscape designers, ecologists, foresters, grounds maintenance staff, to play workers and health workers, all wishing to adapt and use a green space for different purposes (Greenhalgh and Parsons 2004). A management plan which takes into account in first line the needs and desires of the people can play the best role to the benefit of the site and the people it serves.

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