



People's perception influences on the use of green spaces in socio-economically differentiated neighborhoods



Francisco de la Barrera^{a,*}, Sonia Reyes-Paecke^b, Jordan Harris^c, Daniela Bascuñán^d, José Manuel Farías^d

^a Pontificia Universidad Católica de Chile, Instituto de Geografía and Centro del Desarrollo Urbano Sustentable, Chile

^b Pontificia Universidad Católica de Chile, Departamento de Ecosistemas y Medio Ambiente and Centro del Desarrollo Urbano Sustentable, Chile

^c Pontificia Universidad Católica de Chile, Centro de Desarrollo Urbano Sustentable and Instituto de Estudios Urbanos y Territoriales, Universidad Diego Portales, Escuela de Sociología, Chile

^d Universidad Alberto Hurtado, Escuela de Sociología, Chile

ARTICLE INFO

Article history:

Received 13 October 2015

Received in revised form 6 September 2016

Accepted 28 September 2016

Available online 29 September 2016

Keywords:

Cultural ecosystem services

Public spaces

Qualitative methods

Social interactions

Urban planning

Urban sustainability

ABSTRACT

Green spaces are considered as indicators of both quality of life and urban sustainability. In Latin America, some analyses have been made regarding the provision and use of urban green spaces, but there are few studies that analyze how peoples' perceptions influence the use of these areas. The article analyzes factors such as preferences for green spaces over other leisure spaces, community attachment, the image of green spaces, social cohesion, and perceptions of safety in three socioeconomically differentiated neighborhoods within the Metropolitan Area of Santiago. Observations and interviews with users and residents were performed. The neighborhoods showed differing patterns, uses and users of the green spaces, explained primarily by differences of perception regarding community attachment, image, and preference over other spaces. Socio-economic status is associated with the intensity and diversity of use, community attachment, and the image of the parks.

© 2016 Elsevier GmbH. All rights reserved.

1. Introduction

Urban green spaces include a wide variety of vegetated public spaces, from large parks on the urban periphery to small green spaces located in densely populated urban neighborhoods (Maruani and Amit-Cohen, 2007). Ad hoc classifications are used to distinguish between urban parks, defined as large green spaces (e.g. larger than 1 ha) that serve an urban region, and small green spaces (e.g. 0.2–1 ha) that serve a particular local neighborhood. Local green spaces in this study refer to small green spaces located in residential neighborhoods that are available for daily leisure activities and recreation. In Latin American and Spanish cities these spaces are called “plazas”, and are widely distributed throughout the urban fabric.

Green spaces provide a wide variety of ecosystem services, including air quality improvement, climate regulation, and other

elements that enhance urban environmental quality (Bolund and Hunhammar, 1999; Heidt and Neef, 2008). They also provide numerous cultural ecosystem services, as they represent spaces for recreation and relaxation, allow for contact with nature, and contribute positively to the mental and physical health of urban inhabitants. Green spaces also favor interactions between people from different social groups, ethnicities and ages, playing a key role in social cohesion (Chiesura, 2004; Ruiz and Carli, 2009; Peters et al., 2010). This role is even more significant in the case of local green spaces, as local residents use them frequently and their area of influence is reduced to particular neighborhoods. Moreover, they offer opportunities to experience and generate shared values among communities (Chiesura, 2004; Peters et al., 2010). Unlike the regulatory and support-based ecosystem services provided by green spaces, the provision of the above-mentioned cultural ecosystem services depends heavily on how people use these spaces.

Much of the relevant research on the use of green spaces analyzes its relation with demographic factors such as population density, age, gender, and socio-economic or ethnic composition of the surrounding neighborhood and/or users (Payne et al., 2005; Kemperman and Timmermans, 2006; Loukaitou-Sideris and Sideris, 2009; Moore et al., 2010; Cohen et al., 2012). Other studies

* Corresponding author at: El Comendador 1916, Providencia, Chile.

E-mail addresses: fdelabarrera@uc.cl (F. de la Barrera), sreyespa@uc.cl (S. Reyes-Paecke), jordan.harris28@gmail.com (J. Harris), dani.bascunang@gmail.com (D. Bascuñán), jm.fariaspereira@gmail.com (J.M. Farías).

have focused on measuring physical features such as size, spatial distribution and accessibility (Coley et al., 1997; Coles and Bussey, 2000; Van Herzele and Wiedeman, 2003; Schipperijn et al., 2010; Reyes-Paecke and Figueroa, 2010; Toftager et al., 2011; Peschardt and Stigsdotter, 2013). Such research commonly employs an indicator that measures the number of square meters of green spaces per inhabitant, which has been extensively quantified in various urban contexts (PNUMA, 2010; UN-HABITAT, 2012), as well as accessibility, which is understood as the proximity of green spaces to urban inhabitants (Coles and Bussey, 2000; Handley et al., 2003; Barbosa et al., 2007).

Prior research has analyzed the relation between the use of local green spaces and socioeconomic characteristics of the community. As an example, Cohen et al. (2012) found that the intensity of local green space use is lower in neighborhoods inhabited by lower income residents. This finding is related to a differential valuation of such spaces for leisure activities between different socioeconomic groups, in which lower income groups often preferred other indoor or outdoor spaces for both personal reasons and perceptions of certain green spaces as unsafe places. Conversely, Dehring and Dunse (2006) concluded that green spaces located in lower income neighborhoods are more frequently used than those in higher income neighborhoods. This is because such communities often have higher population densities and lack private green spaces in their homes, depending on public spaces for open-air activities. Moreover, there is evidence that the physical structure of green spaces may also influence use, in which the size, maintenance quality, lighting, variety of infrastructure, and availability of activities and facilities for people with disabilities, have been deemed significant factors (van Herzele and Wiedemann, 2003; Giles-Corti et al., 2005; Neuvonen et al., 2007; Schipperijn et al., 2010; Lapham et al., 2015). Historically, public policies have been concentrated on the physical structure of public spaces because these can be more easily modified to favor higher levels of use.

This article analyzes the uses and perceptions of green spaces in neighborhoods of differing socioeconomic levels, testing both individual and community-based factors in the context of a capital city of a developing country.

1.1. Research on the use of green spaces

The need for research on the use of green spaces that includes qualitative dimensions responds to the fact that the mere existence of green spaces does not warrant their use by the public. A qualitative approach allows for a better understanding of how people's perceptions and preferences can affect the use of green spaces in different urban settings (Kessel et al., 2009; Jansson and Persson, 2010; Pascual and Peña, 2012; Wright-Wendel et al., 2012; Lapham et al., 2015). Given the growing complexity of cities and metropolitan areas, progress in this area of research represents one of the most important challenges for improving the design and planning of public green spaces.

Research in different cities has shown that human preferences and perceptions regarding green spaces strongly affect the actual use of such spaces. In terms of preferences, through a household survey applied in the Metropolitan Area of Santiago (Chile), Krellenberg et al. (2014) found that people from different socioeconomic groups all prefer well-maintained green spaces with high quality facilities, regardless of the proximity of these spaces to their homes. Through the use of ethnographic techniques, Kessel et al. (2009) provide evidence that the use of green spaces depends on the perceptions that people have of the activities that are deemed appropriate for these spaces, as well as how they visualize their own use of the same spaces. This kind of subjective information is best collected through in-depth or semi-structured interviews in which the interviewees have more freedom to explain their answers, and

interviewers can delve deeper into relevant issues that emerge from the conversation. There are also differences regarding the use of green spaces associated with different ethnicities, between immigrant and local users, and related to gender and age. These factors influence the frequency of use, type of activity performed, and what time of day they are used (Parra et al., 2010; Peters et al., 2010; Wright-Wendel et al., 2012). In Latin American cities gender differences tend to imply that women preferably visit green spaces nearer to their homes, for shorter periods of time, only during the daytime, and often accompanied by their children (Wright-Wendel et al., 2012).

The relation between higher levels of vegetation cover and stronger links between local inhabitants as well as increased social capital has been researched in various urban contexts, although almost all such studies have been carried out in cities located in the Northern Hemisphere (Kuo et al., 1998; Maas et al., 2006; Holtan et al., 2015). This body of research suggests that the provision of vegetation cover stimulates the use of outdoor spaces, which in turn promotes an increase in social capital. In this way, the use of outdoor space can be seen as a factor that mediates between green space and social interaction (Holtan et al., 2015). Finally, in different urban settings place attachment has been positively related to differing levels of maintenance of green spaces and pro-environmental attitudes in general (Garcia-Ramon et al., 2004; Budruk and Tyrrell, 2009).

1.2. Individual and community-based factors linked to use of green spaces

People's perceptions of green spaces can be analyzed through the lens of how such spaces are valued, such as whether or not they are preferred compared to other everyday spaces (Cohen et al., 2012), how communities interact with and within green spaces, and how these spaces are characterized through individual discourse.

The present research focuses on four individual and community-based factors (or criteria according to Table 2) associated with the use of green spaces considered relevant by the authors based on an extensive literature review. First, *community attachment* refers to the perceived possibility of acting within and upon a space due to a sense of ownership. The *image* dimension of green spaces refers to intangible and symbolic meanings associated with the green spaces, taking into account the importance that inhabitants attribute to them, functions that a green space is expected to fulfill, and how such spaces should be used (Kessel et al., 2009; Peters et al., 2010). A third dimension is *perception of safety*, regarding whether the green space is considered to be a safe place, which strongly affects the level of use (Loukaitou-Sideris and Sideris, 2009; Dempsey et al., 2011; Wright-Wendel et al., 2012; Lapham et al., 2015). Finally, *social cohesion* refers to the sense of belonging that inhabitants have to the neighborhood, related to the socio-cultural interactions that occur between people (Uzzell et al., 2002; Dempsey et al., 2011; Pascual and Peña, 2012; Holtan et al., 2015).

1.3. Green spaces in developing countries

As a result of rapid population growth and a lack of urban planning, cities in developing countries tend to have higher population densities and lower environmental quality compared to cities in developed countries (Pauchard et al., 2006; Madureira et al., 2011; Wright-Wendel et al., 2012; Senanayake et al., 2013). In this context, the creation of green spaces has been a strategy for the improvement of environmental quality, due to the positive effects that such spaces have on social and environmental dimensions connected to quality of life (Tzoulas et al., 2007; Senanayake et al., 2013). However, despite such efforts the profound social and

Download English Version:

<https://daneshyari.com/en/article/6461932>

Download Persian Version:

<https://daneshyari.com/article/6461932>

[Daneshyari.com](https://daneshyari.com)