Residents and urban green spaces: The case of Bari

Abstract
The total area of public green spaces in the city of Bari, Italy is more limited than in most other Italian cities (2.9 m²/inhabitant). This fact makes it an interesting subject for research into the general perception that the residents of the city have of green spaces and their behaviour patterns when using them.
A questionnaire (27 questions) was presented by telephone to a representative sample (n=351) of the population of Bari. The aims of the study were: (a) to gain insight in the perception of green spaces with particular reference to those green areas within the city itself; (b) to examine behaviour during visits to parks and gardens and means of transport used to reach them; (c) to investigate what kind of relationship should be set up between the local authority and the population regarding information and participation.
The results show that respondents perceive the green areas as a life quality enhancer in accordance with some previous studies carried out in Italy and in other countries. Citizens are moreover conscious of the limitations in quality and quantity of green areas in their own city, although this result needs to be more closely analysed in the future. Patterns in the use of public green areas proved to be strictly connected with age, sex, marital status, area of residence. Another conditioning factor was the system of mobility. The results moreover underline how citizens see the public and private green areas as single beneficial system.

The research also demonstrates the potentials of applying telephone surveys in studies concerning urban forests.

Introduction

In recent years more and more interest has been given to urban green space. Originally, merely a decorative element in towns and cities, green space has now taken on a new value and function, the importance of which is widely acclaimed within the parameters of sustainable development.

The presence of green spaces represents a fundamental asset above all when considering contemporary urban reality, with its traffic congestion, pollution and lack of space for socialising. However, the presence of urban furniture, flowerbeds and public parks is not in itself sufficient for claiming the town to adhere to a sustainable model. The efficiency of urban green space lies largely in its overall structure – as an integral part of the entire system of green space throughout the whole metropolitan area – and in the function which it serves in relation to both the entire territorial context in which it is inserted, and to whom is envisaged to be using it.

The greatest asset of the multifunctionality of urban green spaces (the term should be extended beyond parks and gardens to include surrounding countryside areas, vegetable plots and orchards, green courtyards and sports grounds, and so forth) is – especially in bigger cities – that of improving environmental quality. When these spaces are referred to as the "green lungs" of a city a highly appropriate evaluation is being expressed as these spaces really do generate both physical and psychological health and well-being, first of all for those who use them but also for the entire urban population (Beato, 2002; Grahn and Stigsdotter, 2003).

The following play a particularly important role in the relationship between citizens and urban green: (a) behaviour pattern; (b) the level of perception on the part of the residents towards the green system in their own city; and (c) the social representations which they construct within their own social context (Lalli, 1995). A large amount of research literature exists on this topic (especially in the USA) showing how urban residents rate the benefits associated with urban forest (e.g., Dwyer et al., 1991, Dwyer et al., 1992; Lohr et al., 2004; Sommer et al., 1994; Wolf, 2004). These studies document that people usually appreciate the practical and aesthetic values of trees but also attribute great importance to other values which are not always so clear or evident. Some previous surveys carried out in Italy show unambiguously that citizens and families pay close attention to the various aspects of the environmental quality of the city (Bambozzi and Sanesi, 1995; La Marca et al., 1996).

In large conurbations, public concern surrounding these issues shows not only uneasiness regarding the quality of life which – in a "risk society" (Beck, 1986) – is inseparably substantiated in the quality of the environment, but also far greater public demand concerning environmental issues than in smaller towns and cities. One of the more significant dimensions of this demand concerns green urban spaces.

On the other hand, the urban system of green spaces has forced its way into urban development thinking on relationships and the elimination of urbanistic, architectural and social barriers. It has now become a citizens' right to have green urban spaces incorporated into city planning. Green spaces no longer figure merely as a decoration, but act as an ecological environmental system, carrying out a wide range of social functions and services. Besides being used as places for leisure, recreation, games and sporting activities, green spaces can indeed generate an elevated level of social participation and collaboration between fellow citizens. Various studies have been carried out, for example, on green areas as places of social aggregation, reduction of conflict between rival groups of young people and reduction of aggression to public property (Newman, 1996; Sullivan and Kuo, 1996; Kuo and Sullivan, 2001; Kweon et al., 1998). Likewise, "green therapy" is becoming increasingly common as a paramedical activity in the treatment of some psychological and physical diseases (Ferrini, 2003).

The aim of the study presented here is to understand what kind of general relationships exist between citizens and urban green spaces in the context of one of the "poorest" Italian cities in terms of public green spaces. Thus, besides assessing visitors' behaviour when using parks and gardens, the research focuses on pinpointing possible alternatives for the management of public green spaces.

According to year 2001 data provided recently by ISTAT (2002), urban green spaces of Bari amount to 2.9 m^2 per inhabitant and the city therefore holds the penultimate place amongst the larger Italian cities (only Naples has a smaller area of green spaces). Moreover in Bari, Apulia's main town, the difference

between the amount of green space per capita set by the Master Plan and the green spaces actually created, totals around 17 m^2. Of the southern Italian cities only Chieti, Cagliari, Benevento and Vibo Valentia show a greater difference between ambition and practice than Bari. All this means that in Bari the density of urban green space – i.e. the relationship between the green area and the area of the municipal – territory is less than 1%, pushing Apulia's most important city into bottom place in the league table of large Italian cities.
This lack of green space in Bari is mainly a result of its history of city development. When observed from the air, three zones can be clearly distinguished. The first is the medieval city with its many narrow streets inside the ancient walls and without green space. The second zone is the “Murat zone” built at the beginning of the 19th century. This zone is characterized by a regular design of streets and buildings. Here the green spaces consist of a few trees along the main streets and within the squares. The third zone is the 20th century city. This has an extremely dense urban structure where gardens and parks have been built during the last three decades.

Section snippets

Material and methods

There are different ways of studying people's behaviour and these can include various techniques for taking samples, and in the case of interviews, for asking questions.

In medical and social scientific fields, growing attention has been paid to telephone interviews which have been used as a tool for scientific investigation for over 20 years (Marcus and Crane, 1986; Siematycki, 1979; Wilson et al., 1998; Worth and Tierney, 1993). However, there is as of yet limited experience in the use of this

Results and discussion

Bearing in mind the other parameters used for stratification, the significance of the sample is equal to a confidence level of 95% with a confidence interval of ±0.05 with respect to the questionnaire's set of 27 questions. The analysis in the subfields derived from the classification work (sex, social status,

etc.) has only relative significance and are reported for information purposes only.

The results are reported below according to the grouping of questions explained above. For each answer,

Conclusions

The study offers a general understanding of the public's perception regarding urban green spaces in one of the “poorest” Italian cities from the point of view of public gardens and parks. Making use of the telephone interviews allowed for drawing up a relevant picture of the perception and behaviour patterns of the citizens. In particular, an emerging sense of strong (positive) feelings towards green areas can be noted in the sample, i.e. green space is being perceived as an element which

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