
Measuring and Analyzing the Safety in Public Parks (Case Studies of Kohsangi and Basij Parks in Mashhad)

Masoomeh Hussein⁹

MSc in Geography and Urban Planning, Hakim Sabzevari University, Sabzevar, Iran

Masoomeh Mahdian Behnamiri

*PhD Candidate of Geography and Urban Planning, University of Isfahan and the
Visiting Lecturer of Geography and Urban Planning, Payame Noor University, Tehran,
Iran*

Abolfazl Sedighi

*PhD Candidate of Geography and Urban Planning, Hakim Sabzevari University,
Sabzevar, Iran*

Received 8 December 2014

Accepted 30 May 2015

1. Introduction

The increasing growth and the development of the cities along with the consequences of modernism and urbanism necessitate the growth of green spaces and parks which play an effective role in improving the conditions and quality of citizen's life and their peace and enjoyment; however, nowadays public parks, which are one of the most important elements of such public spaces, have created numerous problems for the safety of the citizens, endangering the health of all the citizens, especially the children and the elderly. Thus, all over the world, the issue of safety in such spaces is of paramount importance and concern regarding the latest incidents in these places, specifically public parks in metropolises which necessitates a scientific review while considering its relation to all of their operators and beneficiaries. To this end, the present research aims to review the safety of public parks in Mashhad according to five factors including perception of safety, hygienic safety, physical safety, psychological safety, and physical accessibility.

2. Theoretical Framework

As one of the fundamental elements of the physical space of cities, public spaces are an important social and communal concept. Such spaces, as one of the places that can provide a peaceful and tranquil resort for the citizens, have always been at the center of urban managers' and planners' attention. From a social-cultural viewpoint, public spaces are places which are created with the aim of producing and fostering extrinsic relations, interactions, engagements along with experiencing

1- Corresponding Author: Email : masume.hoseini90@yahoo.com

social changes where various groups with different demands and tastes are gathered. In this respect, social interactions aiming at creating a means of public communication for the specific purposes in public spaces are among the major prerequisites for categorizing a public space as an urban public park which can play a crucial role in the health of the city and its citizens. This is based on Farley's theory that physical activities of citizens who think they are living in an unsafe environment is less than those who deem outdoors as a safe place. According to this theory, utilization of such urban spaces, including parks, is directly correlated with the individual's sense of safety. As a result, special attention is required to be paid to this crucial issue. Moreover, according to the domino theory, incidents happen due to some factors and elements which should be identified and mitigated to prevent the formation of the unsafe spaces. Hence, urban planners and managers are expected to have a clear mandate to create safe places by conducting scientific studies along with following fully operational programs.

3. Methodology

The study uses the document analysis as well as the observation method to provide both a descriptive analysis along with the quantitative survey based one. In this respect, to study and evaluate the safety level of the two parks from the visitors' perspective, document analysis was utilized for the theoretical aspect and the field-survey was applied in the phase of data collection. The participants included the visitors of the two mentioned parks for whom owing to the lack of precise statistics regarding the number of visitors, Cochran formula was used for calculating the sample size due to the lack of precise statistics regarding the number of visitors leading to the sample size of 384. As a result, around 200 questionnaires were distributed in each park.

4. Results and Discussion

Considering the importance of parks in the urban space, the issue of safety is among the most significant points which have to be borne in mind in planning, implementing, managing, and maintaining in order to satisfy the visitors' needs and to avoid the occurrence of any unpleasant incident. . In this respect, the aim of the present research was to do a comparative analysis of the safety factors in the public parks, namely perception of safety, hygienic safety, physical safety, psychological safety, and physical accessibility. Regarding the evaluation and analysis of safety in the two parks, the findings of the study revealed that the visitors of Kuhsangi Park in Mashhad feel much safer compared to the ones visiting Basji Bustan. Kuhsangi Park is in a reasonable condition as it provides a higher level of safety compared to Basij Park. Although the general public is somehow satisfied with the safety of Kohsanig Park, more attention should be paid to the issues of planning and designing urban green spaces. Using t-test to testify the third hypothesis of the

study demonstrated that a significant difference exists between the parks under study. Generally it can be said that the level of safety in parks under study is positively correlated with their district's level of development; the more developed the district, the higher the safety coefficient.

5. Suggestions

For the purpose of improving the condition of the parks under study, and with regards to the mentioned factors, following suggestions are made:

1. Due to the lower-than-average level of safety, Basij Park should be equipped with the much better lightning system
2. Designing and checking principles of physical safety
3. Investigating and supervising the physical accessibility of Mellat Park
4. Taking the factors of perception of safety in Mellat Park into account
5. Since reaching a satisfactory safety condition in parks requires participation of citizens and visitors, increasing the people's awareness and teaching in this respect seems necessary
6. Considering the fact that safety is one of the major issues in the public's reception of urban green spaces, identifying the influential factors, holding educational classes for the people in charge as well as conducting research regarding this issue is suggested.

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How to cite this article:

Husseini, M., Mahdian Behnamiri, M., & Sedighi, A. (2015). measuring and analyzing the safety in public parks (Case studies of Kohsangi and Basij Parks in Mashhad). *Journal of Geography and Regional Development*, 13(24), 185-207.

URL <http://jgrd.um.ac.ir/index.php/geography/article/view/42142>