

Measuring Citizens' Space Security through Multi Criteria Decision Making Technique (MCDM) (Case Study: 13 Districts of Mashhad Metropolitan)

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Extended Abstract

1. Introduction

Security is considered as one of the most striking aspects of development of a society which provides growth, development, and stability. In fact, security is one of the most important goals, resources, and sustainable values of society. Meanwhile, dynamic growth of a city and its livability for the citizens cannot be obtained except by providing security. It is obvious that without security, we can expect the efficiency of the urban structure as a system of components for citizenship and life settlements with prosperity and human dignity. Security in urban structure and the citizen's enjoyment of a sense of security is increasingly important and is a fundamental component of sustainable social development. Mashhad metropolis, like many metropolises around the world may threaten the rights of its citizens in terms of their security. This article tried to answer the following questions: what are the most important factors to citizens in urban area in sense of security? And to what extent can we assess the sense of security in 13 districts of Mashhad?

2. Theoretical Framework

Lack or inadequacy of security is called insecurity. Insecurity in satisfying each of the individual needs impairs some functions of the human. In fact, security refers to peace of mind and insurance of no violation to life, property and other human rights. This exclusive value is one of the necessities of private and social life. The meaning and the purpose of this word is comfort and peace of mind according to Sharman's (1988) interpretation.

In terms of social security in cities, Marks Weber (1904) believes that citizen's understanding of

each other decreases, informal social control process increasingly weakens among people, and the way for deviance, disorder, and finally insecurity is provided as the numbers of people involved in interaction increases. Part of this security is related to spatial properties. In fact, space security refers to safe conditions which become meaningful through spatial arrangement of elements, the placement of components and infrastructures, and services along with the performance of human behaviors. In other words, space with all elements and also through the identity given by the space based on this definition of security plays an important role in forming the sense of belonging and citizens' confidence. Also, in addition to familiar places and spaces, this could be obtained in the form of urban furniture with familiar style such as benches and bins, phone kiosks and bus shelters, and other elements annexed to the environment.

3. Methodology

In this study, analytical-descriptive and survey methodology were used. According to the issue and its theoretical foundation and the attempts made to answer the key scientific questions, the study identified the most important factors in the formation of citizen's security and prioritized the areas of 13 districts in Mashhad based on these indices. Thus, after extracting and determining the effective factors through library and documentary resources, a questionnaire was designed and used in 13 district of the case study area. The sample of the study included total population of Mashhad metropolis in which 282 designed questionnaires were distributed to the sample of the study based on Cochran's formula with 0.06 rate of error. To analyze the data, the Excel and SPSS software

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were used. To rank the areas under study based on citizens' security, PROMETTE as a one of Multi-Criteria Decision Making (MCDM) was used.

4. Results

The initial results obtained from completing the questionnaires in 13 districts of the case study show that security is more than a moderate amount in most of the areas (2.5) in terms of almost all the measured indicators. Also, results explain that based on V crammers correlation coefficient and K square test, there are not meaningful relations between space security of citizens and the gender indicator. It is safe to say that there is not much difference among the factors affecting the safety of women and men in the study area and that citizens are equal concerning the sense of space security. According to the results of prioritization, environmental security of the citizens in the districts of 11, 12, and 9 is more than the other districts in Mashhad. Meantime, districts of 5, 2, and 3 were less secured areas according to the determined indicators and the citizens' views.

5. Discussion

Perhaps the high level of environmental security in developing districts such as districts of 12, 11, and 9 could be considered as a result of appropriate spatial and physical planning, planned infrastructures, wide and low density, and optimal spatial arrangement of urban elements and housing. The amount of security is always a function of various spatial factors, including economic and social conditions of each sector and

neighborhood resident, texture, orderly development, infrastructure, and organization of services. Districts of 5, 2, 3, 4, and 8 have lower space security compared to other areas. According to the map of the areas under study, high density of construction, old fabric, disparate social and economic conditions, shaggy and unfamiliar urban identity due to the special land uses including tourism services related to pilgrimage spaces may influence the sense of security in these areas.

6. Conclusion

The result of the study show that the concept of security which has changed during the past decades with an increase in complexity of social relations has lost its initial and physical state including various aspects of economic, social, cultural, and political aspects. Therefore, the need for security is vital for all aspects of social activity. The obtained results showed that as we approach the north and northeast of Mashhad, the sense of security increases, whereas the obtained data also indicate a decrease in the sense of security in east of Mashhad. Also it is clear, the eastern districts have disproportionate social conditions as compare with western districts due to the fact that they are located in the pilgrim tourist center. Despite the various state of space function, physical indicators such as physical density and compactness, space security is decreased.

Keywords: Citizen's security, urban design, Mashhad Metropolis, PROMETTE technique.

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